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American Railroad Journal.

New York Saturday, November 5, 1870.

The Portland and Rochester Railroad.

The importance of a railroad, and its utility as a transportation route, are not always determined by its length in geographical miles or the cost of its construction. On the contrary, some short roads, from the peculiarities of their situation and the importance of their connections, render a service to the country that is of more importance to its industrial and commercial development than that often rendered by great through routes extending over half the continent. An instance of this is found in the Portland and Rochester Railroad, a short line of about fifty-two miles, extending from Rochester, New Hampshire, to Portland, Maine, but forming the connecting link in the chain of direct communication between New York and Halifax, by a shorter and more direct route than that now followed by way of Boston; besides establishing a new and more direct connection between the railroad system of the State of Maine—embracing in existing and projected lines some eight hundred miles of road—and that of the entire country. The only present connection between these two systems is that established by the Portland, Saco and Portsmouth road, which is not only inadequate to the business expected of it, but which, having a monopoly of the Maine traffic, might take advantage of its position to charge mo-

nopoly rates upon both passengers and freights. The prevention of this monopoly and the establishment of a healthy and legitimate competition for the Maine traffic by the opening of a more direct route to New York and the West, is one feature of the enterprise, which is sufficient to secure for it a recognition as one of the most important railroad enterprises now in progress in New England.

But while the value of the Portland and Rochester road as a new outlet for the traffic of the network of railroads centering at Portland is very great, its importance as a part of the new through route from New York to Portland and Halifax is far greater, as will be seen from a glance at its many connections, both lateral and terminal. Besides the local railroads of Maine, its eastern connections open for its traffic direct communication with Halifax via the Kennebec and Portland, and the Maine Central and the European and North American Railroads, together forming a chain of direct communication between Portland and Halifax. At its western terminus its connections, branching in a southerly and southwesterly direction, are many and important. What these connections are, and their relative value as tributaries to the business of the Portland and Rochester road, can only be briefly indicated within the necessarily restricted limits of this article. The Worcester and Nashua road, now building, establishes direct communication with Nashua, N. H., from which point the Worcester and Nashua and the Norwich and Worcester and Worcester and Providence roads establish direct communication with New London and Providence, thus opening a new route to Portland and Halifax for the Eastern traffic of the New London and Providence steamers. From Rochester the Cochecho Railroad, the Boston, Concord and Montreal, the Vermont and Canada, and the Ogdensburg Railroads, open a direct connection with Montreal and Ogdensburg, N. Y., while the Concord and Rochester road, soon to be placed under contract, will give a short and direct line to Rutland, Vt., and the entire West. The completion of the Worcester and Nashua, and the Portland and Rochester roads, will also open a new and direct route to the most desirable section of the White Mountain region, which will secure for it a large and profitable

summer travel. From Groton Junction, a connection via Fitchburg, by the Vermont and Massachusetts Railroad will be established with the Hoosac Tunnel, now rapidly approaching completion, and the West. From Rochester, again, the Boston and Maine, and the Eastern roads, offer competing routes to Boston, while a third connection is made with the same city, via the Nashua and Boston and the Lowell roads, at Nashua. Another connection with the West is also obtained at Worcester, Mass., via the Boston and Albany road. With this city the connections are the most direct possible, shortening the distance to Portland by about forty miles, and avoiding the delays and difficulties incurred by both passengers and freights following the existing route via Boston. The completion of the road to Rochester, and the building of the Nashua and Rochester road—for which the capital is now nearly provided through subscriptions to the capital stock—will complete the connection between Portland and New York via the Sound steamers, as we have shown, the Springfield line, the new Connecticut Air-Line route, and the Boston, Hartford and Erie road, when the latter shall be completed to Palmer. Thus, while the distance between New York and Portland is materially reduced, the delay and expense of transshipping freight at Boston, and transferring passengers through the city from station to station, will be entirely obviated. The same favorable conditions will attract for the new route a large amount of through business to Halifax. Continuous rail communication to Halifax shortens the time consumed in a voyage to Europe by three or four days, and it is quite certain that a large portion of the European travel will follow the new route, being shorter, quicker and more convenient than passage to and from this port direct. These favorable conditions, and the network of important connections, insure for the Portland and Rochester road and its continuation, the Nashua and Rochester road, an extensive and largely profitable business in both through and local traffic, and give them a prominent rank among the most important railroads now building in the New England States. A glance at a good railroad map, giving the new road and the connections we have indicated, will show more perfectly

than we have been able to do the importance of this link in the chain of direct through communication between New York and Portland.

The financial condition and prospects of the Portland and Rochester Railroad Company, and of the Nashua and Rochester Railroad Company, whose interests are closely linked with it, are unusually favorable and promising. The former of these roads is making satisfactory progress towards completion, and it is the intention of the managers of the enterprise to open the entire line to business before the close of the current year. To facilitate the completion of the work the Directors have decided to issue a limited number of first mortgage bonds, of convenient denominations of \$200, \$500 and \$1,000. These bonds are to run 17 years, bearing interest at the rate of 7 per cent. per annum. With the loan granted the company by the City of Portland, they constitute the only lien upon the company's property. This issue of bonds, to the amount of \$350,000, is made with the entire concurrence of the City of Portland; a formal vote of the city council, approved by the Mayor, having placed them upon the same footing in the first mortgage security as the loan of \$200,000 made by the city itself, and thus making \$1,050,000 including the current issue of new bonds, the entire amount of the mortgage upon the property of the company. The management of the enterprise is in good hands, and the road, as far as completed, has been built in the most thorough and substantial manner—the section now in operation enjoying a large and profitable local trade which is in itself sufficient to insure the financial success of the line. Though less advanced, the prospects of the Nashua and Rochester road may be considered equally favorable. Most of the large companies owning and operating the roads which form its principal connections are represented in its management, and largely interested in its progress; and its completion will be effected without unnecessary delay, if money and business enterprise can together accomplish this desirable result.

From the facts above briefly outlined, and many others of which we are compelled to omit the mention, it is evident that the Portland and Rochester road will prove one of the most useful, as well as profitable, railway lines in the Eastern States. Lightly encumbered, and possessing extraordinary facilities for the command of a large and profitable traffic in through and local freights and passenger travel, its prospects are certainly as good as could be desired by the most prudent investor. The mortgage issued as a security upon the bonds soon to be offered in the Eastern markets, is executed to Messrs. H. J. Libby, Frederick Fox and John A. Waterman, Directors, who have been elected as Trustees for the bondholders. These bonds are in all respects a first-class security, and the importance of the road, and of its continuation from Rochester to Nashua, is sufficient to insure for them the favorable attention of the enterprising capitalists of New England.

The First National Bank of Altoona, Pa., has offered to exchange \$130,000 of five-twenty six per cent. bonds for an equal amount of the new five per cents authorized by the recent act of Congress, in furtherance of the refunding of the national debt.

Old Colony and Newport Railroad.

The income of this road for the years ending May 31, 1869 and 1870, was as follows:

	1869.	1870.
From passengers	\$835,064 97	\$951,572 72
" freight	476,292 47	482,684 52
" expresses	54,937 24	64,718 05
" rents	22,612 10	26,519 96
" mails	13,647 98	6,564 89
" miscellaneous ..	113 99	2,169 00
" extra baggage..	1,626 62	2,166 60
	\$1,404,295 37	\$1,536,395 24

Expenses, viz:

Passenger department ..	\$134,631 08	\$139,183 90
Merchandise " ..	114,518 22	123,118 43
Locomotive " ..	234,868 69	254,718 14
Maintenance of way...	192,045 89	229,385 29
General expenses.....	85,107 27	112,688 18
Miscellaneous	39,672 79	40,270 80
	\$800,813 94	\$899,359 74
Earnings less exp.	\$603,451 43	\$637,035 50

From which deduct:

Town, City and State taxes.....	\$67,584 14
U. S. tax on gross receipts	25,680 10
Interest and coupons paid.	183,948 02
	277,412 26

Net income.....	\$859,623 24
Balance of income per last report (less debt charged off, \$15,000, and U. S. tax on surplus, \$1,714 95).....	211,140 34
Total.....	\$570,768 58
Deduct dividends January and July \$3 per share each, and U. S. tax...	312,726 32

Balance May 31, 1870.....\$258,037 26

Compared with the previous year the gross receipts show an increase of \$132,099 87; with an increase in working expenses of \$98,515 80—making the increase in net earnings \$33,584 07. The amount paid for interest and taxes, (not including tax on dividends,) is \$20,512 51 in excess of the previous year. The increase of net income, after payment of interest and taxes, is therefore \$13,071 56.

The increase in the number of passengers carried was 351,621, in the mileage of do., 2,450,416, and in the amount received therefrom, \$116,507 75. The increase in tons carried was 19,057, and in receipts therefrom, \$6,392 05. Of the increase from passenger receipts, \$67,137 99 was from the local business. The local freight receipts have increased \$9,299 20. The freight receipts from connecting lines decreased \$2,907 15. The increase in number of miles run by trains was 42,531. The report says:

Three new locomotives, five passenger cars and thirteen freight cars have been added to the rolling stock.

Eight locomotives, ten passenger cars, eight freight cars, and twelve gravel cars have been rebuilt.

These repairs and alterations, with other repairs, make our rolling stock in better condition than it was last year.

About 700 tons of new rails and 34,000 new sleepers have been used in repairing the track, and 1,600 tons of rails have been taken up, repaired, and relaid. This, with the ordinary repairs, has kept our track in good condition.

The new passenger depot, engine house, and turn-table in process of construction last year at Plymouth, together with large additions to the freight depots and improvements to the depot grounds, have been completed, affording con-

venient and ample depot accommodations for the business of that city.

Considerable additions and improvements have been made to our depot accommodations at Fall River, especially for the New York business, in connection with the steamboat line.

The increased expense of operating the road the past year, amounting to about \$98,000, is accounted for by the increase of taxes, of miles run by trains, new depots, and repairs of buildings, road, and bridges.

The cost of repairing the damages to the road, bridges and buildings, caused by the great gale of September last, was about \$20,000.

The new arrangement for New York business has worked well, and the receipts have been satisfactory, although the rates of freight were very low during a part of the year. The depression in business has lessened our income from freight.

The local business of the Dighton and Somerset branch has increased about \$14,000 during the past year.

No change has been made, since the last report, in the land at South Boston.

Some further reductions have been made during the past year in the rates of fares and freight, season tickets, &c., and some increase in the number of trains. At the present time, our rates are as low, and our accommodations and facilities as great, as on other railroads terminating in Boston. The results of the present policy in this respect is shown in the continued increase of our business.

The trains have been run with regularity, and without accident to property. Two passengers have been fatally injured: one of whom jumped from an express train while in motion, and the other fell from the steps of a car. But little damage has been done to property of any kind; and the road, with all its appurtenances, has been well kept up, and is now in good condition.

The directors have deemed it expedient to purchase the Quincy Granite Railway, in order to extend the Mount Hope branch of this road to Belknap Square in Quincy. It is believed that this extension will, in future, afford us considerable freight business in connection with the quarries, and that there is already sufficient population upon the line to pay the expenses of passenger trains. The length of the proposed branch is about 3½ miles, all but about one-half mile of which is graded ready for the rails. It is estimated to cost, including depots, &c., about \$75,000.

The Duxbury and Cohasset Railroad Company, having received town subscriptions to its capital stock, which will insure the construction of its road, and it being important that it should form an extension of the South Shore Railroad, the directors have thought it for the interest of this corporation to assist the South Shore Railroad Company in providing for their stock subscription of \$125,000.

Citizens of New Bedford, Fairhaven, Acushnet, Rochester, Freetown, Lakeville, and Middleboro' have obtained a charter for a railroad from New Bedford to Middleboro', forming a shorter and more convenient route for travel between those points and Boston. Its location is very favorable, and the road can be built for a comparatively small sum. If the parties in interest succeed in procuring sufficient subscriptions for stock to insure the building of the road, the directors consider that it will be expedient for this corporation to aid in its construction in the manner and to the extent provided in its charter.

The equipment of the road is as follows: 27 passenger and 11 freight locomotives; 69 passenger, 18 baggage, 167 long box, 199 long platform, 9 cattle, 7 short box, 37 short platform and 90 coal and gravel cars. Number of miles run by passenger trains, 613,252; by freight trains, 270,978; by gravel trains, etc., 38,168—total, 922,398. Number of passengers carried, 2,783,969; do., carried one mile, 42,664,450. Tons of merchan-

disc carried, 843,774; do., carried one mile, 9,791,472.

TRIAL BALANCE, MAY 31, 1870.

Construction.....	\$7,777,489 89
Rails, shop-stock, &c.....	113,086 60
Cash.....	157,199 93
Bills receivable.....	151,853 97
Dorchester and Milton Br. R.R. Co..	86,937 88
Eastern Branch R. R. Co.....	54,800 00
Agent's department.....	12,258 15
Contract ac'ts and connecting lines..	107,045 33
	\$8,410,621 75
Capital stock.....	\$4,958,420 00
Bonds due Sept. 1, 1870.....	9,000 00
" " " 1, 1874.....	1,000 00
" " April 1, 1875.....	458,000 00
" " Sept. 1, 1876.....	1,000,000 00
" " Aug. 1, 1877.....	1,888,000 00
" " Sept. 1, 1884.....	32,000 00
Bills payable.....	146,000 00
Unpaid dividends.....	3,564 49
Dividend payable July 1, 1870.....	156,800 00
Income account—balance.....	258,037 26
	\$8,410,621 75

President.—HON. ONSLOW STEARNS.

Directors.—Onslow Stearns, Uriel Crocker, Benjamin Finch, Francis B. Hays, Oliver Ames, Samuel L. Crocker, John S. Brayton, Minot Tirrell and Royal W. Turner.

Treasurer.—JOHN M. WASHBURN.

Superintendent.—W. H. BULLOCK.

Southern Transcontinental Railway Co.

At a meeting of the corporators elected by the Legislature of the State of Texas to organize the Southern Transcontinental Railway Company, held in this city on the 31st ult., the following gentlemen were unanimously elected directors: Marshall O. Roberts, New York; John C. Fremont, New York; E. B. Hart, New York; H. W. Gray, New York; Edward Weston, New York; W. R. Stewart, New York; Ames Van Wart, New York; J. W. Forney, Pennsylvania; J. B. Bowman, Kentucky; Geo. Maney, Tennessee; C. F. Holly, New Mexico; R. M. Bishop, Ohio; J. W. Throckmorton, Texas; B. F. Grafton, Texas; G. H. Giddings, Texas; H. G. Stebbins, New York; W. R. Travers, New York; John J. Astor, New York; Edwards Pierrepont, New York; N. P. Banks, Massachusetts; J. D. Cameron, Pennsylvania; Z. F. Smith, Kentucky; W. S. Sherrod, Alabama; M. C. Hunter, Indiana; S. W. Morton, Kentucky; W. M. Harrison, Texas; W. T. Clark, Texas; J. M. Tebbets, Arkansas; E. W. Rice, Iowa. The officers are: Marshall O. Roberts, President; Col. Henry G. Stebbins, Vice President; Wm. R. Travers, Treasurer; John D. De-frees, Secretary; and R. M. Corwine, Attorney.

Baltimore and Potomac Railroad.

The contracts for the construction of the Baltimore and Potomac Railroad through Charles county are now being made. The right of way has been secured, but in a few instances in which the land belongs to the estates of decedents, condemnation by juries are required. This will be attended to during the present week. On next Monday the contracts for the grading of the Alexandria and Fredericksburg Railroad, a branch of the Baltimore and Potomac, will be let. As soon as the construction of that part of the road running through Charles county is provided for, the grading between the city limits and the Patapsco will be begun.—Balt. Am.

The railroad between Winona and Mankato, Minn., has been completed and opened for traffic.

Comparative Economy of Iron and Steel Rails.

By ASHBEL WELCH, C. E.

Thy unit of value used in the following investigation is that of a mile of rails; without regard to how it is made up of tons per mile or rate per ton.

We shall have occasion to speak of value in each of its three ordinary senses, always distinguishing which; otherwise our results will be conflicting. The greatest difficulty met with in the study of our subject, arose from the ambiguity of this term.

The *intrinsic value* of a mile of rails is measured by their capacity for usefulness, and that, mainly by their endurance; and that depends on their material, size, form and quality. It does not vary, and it does not distinguish between present and future usefulness.

The *exchangeable value* is measured by price, which depends not only on intrinsic value, but on many other things, and varies frequently.

The *economic value*, as we shall call it, is measured by the combined capacity and opportunity for usefulness, that is, the actual usefulness where used, under actual circumstances. It is the value to the user. Future usefulness and future expenses chargeable against it, must be reduced to present equivalents. It may vary by variation of traffic, that is of opportunity for usefulness. It is this kind of value with which we have principally to do. We shall use the word in this sense when not otherwise stated.

An engineer who speaks of value, is likely to mean *intrinsic value*; a merchant, *exchangeable*; a shareholder, or his representative, *economic value*.

Those who have ruined their employers by splendid engineering, have done so because they neglected the distinction between the intrinsic and economic values of their work. They have created capacity for usefulness entirely disproportionate to the opportunity for usefulness.

That is the best engineering which accomplishes the purpose most economically. The present enquiry is therefore a proper one for engineers. They err who look only at intrinsic values.

A heavy steel rail, laid in a car shed, has many times the intrinsic and four or five times the exchangeable value of a light iron rail; but for use in that place, scarcely any more economic value.

These values, though widely different, are related. Economic value depends partly on intrinsic, and so in that direction is indirectly related to exchangeable value, which is also partly dependent on intrinsic. Economic value is directly affected by future prices, which control the cost of renewal or replacement.

We shall speak of the duration of rails without distinguishing between the effects of endurance, amount of traffic, weight of machinery, or speed of trains. These and other things must be carefully considered in determining the data to be used in the calculations.

Except when otherwise stated, traffic, and therefore values as well as prices, will be considered constant.

The economic value of a short-lived superstructure is most affected by endurance; that of a long-lived one, by interest, on which depends the present values of future quantities. If one mile of rails will last one month, and another ten months, on the same road, and the cost of renewal in each case is equivalent to a total loss of the rails, then, for that road, the latter is worth nearly ten times as much as the former. But if one will last ten years, till money doubles, and the other ten times as long, then the latter, for that road, is not worth quite twice as much as the former.

The present value of the second decade of the life time of a rail, is only half that of the first; of the third decade, only a quarter, and of the tenth, less than a five hundredth part of that of the first.

On a road where iron rails will last six or eight years, it is therefore of comparatively little consequence whether steel will last half a dozen, or a dozen times as long.

As the value of the rails for a particular road depends not only on their endurance, but also on the amount of traffic they are to carry in some

specified time, that is, on their opportunity for usefulness, it is important to estimate correctly, not only what they are able to carry, but what there will be for them to carry. An error in estimate of traffic on any road, is also an error in estimate of value of rails for that road.

It greatly facilitates the comparison of the values of rails, or other things of different duration, with constant traffic or constant tendency to deterioration, to compare both with those that under the same circumstances will last forever. The relations of the destructibles to the indestructibles are simpler than their relations to each other.

The practical question has generally been, and often continues to be, not, which is most economical for perpetuation, but whether iron should be used first, while traffic is light and money scarce, and steel dear, and then, when worn out, be replaced by steel.

Let i be the value of a mile of iron, or other inferior or light rails for perpetuation, and j for replacement by some superior rails, that in the place to be provided for will last through the time τ ; s the value of steel, steel headed, or some superior or heavier rails that will last a longer time τ' ; and v the value of a mile that under the same circumstances will last forever.

Let z and z' be the losses at the times τ and τ' respectively for renewals; including re-rolling, transportation, relaying, interruptions, repairs and interest thereon up to the time of renewal, risks and all other expenses and inconveniences; and d the decrease in economic value of the superior rails at the time when the inferior are worn out.

If interest is compounded more than once in the unit of time then r the real rate will be more than the nominal rate.

Let r be the rate in cents of interest for the unit

of time; $a = (1+r)^T - 1$ the rate of accumulated interest for the time τ , and a' for the time τ' ; and a'' the rate for a time equal to $\tau' - \tau$.

Then supposing traffic and cost of renewals constant, $a v = a i + z$ and $a' v = a' j + z'$. Hence

$$(I.) \quad v = i + \frac{z}{a} = j + \frac{z'}{a'}$$

$$(II.) \quad i = v - \frac{z}{a} = j - \frac{z'}{a'} + \frac{z}{a}$$

$$(III.) \quad s = v - \frac{z}{a} = i + \frac{z}{a} - \frac{z'}{a'}$$

The whole current cost for each unit of time $= r v$; which consists of two parts, the interest $r i$ or $r s$, which is paid as it accrues, and the economic depreciation $\frac{z}{a}$ or $\frac{z'}{a'}$ the payment of

which, with the interest on it, is postponed till the rails are worn out.

The whole current cost that accrues during the lifetime of the rails is, $a v$ or $a' v$, consisting of interest $a i$ or $a' s$, and losses on renewal z or z' .

$$\text{The present value of the loss } z \text{ is } \frac{z}{a+1}$$

$$(IV.) \quad \text{The present value of } z \text{ and its successors forever} = \frac{z}{a}$$

The present value of the accumulated interest and loss at the time τ is,

$$(V.) \quad \frac{a i + z}{a+1}, \text{ which is sometimes a convenient measure of the expensiveness of the rail.}$$

The physical depreciation and consequent decrease in intrinsic value of a steel rail, when the iron rail is worn out, is,

$$(VI.) \quad \frac{z'}{a'}$$

but the economic depreciation and decrease in economic value, d is

$$(VII.) \quad d = \frac{z'}{a'} - \frac{z}{a} = a v - a s, \text{ supposing traffic}$$

constant.

If an iron rail will last till money doubles, and a steel rail four times as long, the physical depreciation of the steel, when the iron is worn out, is one-fourth of the cost of renewal; but the economic depreciation, the decrease in value to the owner, is only one-fifteenth of that cost. For, supposing the present value of the first decade to be 8; that of the second will be 4; of the third 2; and of the fourth 1; and the sum of present values of the first three decades will be 14; that of all four decades only 15; so that the value to the owner, is reduced only one-fifteenth by a reduction of one-fourth of the duration of the rail.

If the loss on renewal is a percentage m on r or m' on s , then

$$(VIII.) \quad 1 = \frac{av}{a+m} = \frac{as(a'+m')}{a'(a+m)} = \frac{as}{a+m} + \frac{am's}{a+m}$$

$a'(a+m)$

Steel partly worn, that will still last just as long as new iron, is not necessarily worth the same as new iron, because worn out steel is probably worth more than worn out iron. So partly worn heavy rails that will last just as long as light new rails are worth more, because the worn out heavy are worth more than the worn out light rails.

The value of the partly worn steel is $s-d$, and the current cost for their residuary lifetime is,

$$(IX.) \quad a''s + L' - (a'' + 1)d.$$

If the price p of the iron is not the same as its economic value i , as compared with steel, the advantage or disadvantage of the iron is of course the difference between p and i ; and the current

cost for the unit of time becomes $rp + \frac{rL}{a}$.

But p in that case cannot be substituted for i in the foregoing equations.

Any future changes in the prices of rails to be perpetuated are most conveniently provided for by increasing or decreasing the values of L and L' .

In comparing steel with iron to be replaced by steel, it is necessary to take the changes in price into the calculation. Let q be the expected price of steel at the time of replacement; and let $b =$ balance of value of the worn out iron rails over the cost of removal, and of laying down the steel to replace them, together with all the attendant risks, inconveniences and expenses. Then to make iron for replacement equally advantageous with steel

$$(X.) \quad s = s + \frac{b+d-q}{a+1}. \quad \text{Or, if the price of steel is constant, } s = \frac{av+b}{a+1} = \frac{as+b+d}{a+1}$$

If the traffic is expected to vary, the time must be cut up into periods coextensive with the lifetimes of the iron rails, throughout any one of which the traffic must be considered uniform, and the depreciations and values at the end of each period found by the preceding rules.

When the traffic varies, the depreciation in value of the steel has no relation to interest past, but only to future interest. It must be found by comparing the remaining duration of the partly worn steel under the expected circumstances, with that of new steel. Then a'' being the rate of accrued interest for a time equal to the difference between the residuary lifetime of the partly worn steel and new steel, and that of new steel put down at the same time being a' , the depreciation of the partly worn steel is

$$(XI.) \quad d = \frac{L'}{1+a''} - \frac{a'L'}{a'(1+a')}$$

The loss from the value of new steel on renewal being L' , that from the value of partly worn steel will be $L' - d$.

When the traffic varies, the value of v varies of course with each change.

Simple and obvious when stated, as the foregoing views and rules are, they were arrived at through calculations much more complex, and sometimes apparently conflicting.

These rules, and the tables deduced from them, do not aid in determining data, nor in any degree supersede experience and sound judgment. But as there are two channels of error, one of judgment and another of calculation, convenient formulae reduce such chances to one; or at least, diminish the second.

In the following tables some illustrations of the applications of the formulae, some results and some numbers useful in finding other results are given.

TABLE 1.

Quantities frequently represented in the foregoing formulae. Steel supposed to last eight times as long as Iron. Traffic constant.

Dura'n of iron rails.	a or a' Rate of accrued interest.	L 4000	a	Present val. of loss on renewals.	L' 5000	a	Present val. of loss on renewals.	r' Corresponding dura'n of steel rails.	a L' =	a' Depreciat'n steel.
1	0.071+	56,380	70,425	8	484	866	271	197	140	98
2	0.147+	27,210	34,012	16	866	271	197	140	98	67
3	0.229+	17,470	21,837	24	271	197	140	98	67	45
4	0.317+	12,620	15,776	32	197	140	98	67	45	30
5	0.411+	9,782	12,165	40	140	98	67	45	30	20
6	0.511+	7,828	9,785	48	98	67	45	30	20	12
7	0.619+	6,462	8,077	56	67	45	30	20	12	8
8	0.734	5,460	6,812	64	45	30	20	12	8	..
9	0.858	4,662	5,827	72	30	20	12	8	..	..
10	0.990	4,041	5,051	80	20	12	8	..	..	..
11	1.132	3,584	4,417	88	12	8	..	..	..	..
12	1.283	3,118	3,897	96	8	..	..	..	..	..
14	1.620	2,469	3,080	..	..	..	..	..	..	..
16	2.007	1,993	2,491	..	..	..	..	..	..	..
18	2.450	1,633	2,041	..	..	..	..	..	..	..
20	2.959	1,389	1,736	..	..	..	..	..	..	..
24	4.214	949	1,186	..	..	..	..	..	..	..
30	6.878	581	726	..	..	..	..	..	..	..
32	8.040	497	621	..	..	..	..	..	..	..
36	10.90	367	459	..	..	..	..	..	..	..
40	14.68	272	340	..	..	..	..	..	..	..
42	16.99	235	294	..	..	..	..	..	..	..
48	26.18	153	191	..	..	..	..	..	..	..
50	30.19	132	165	..	..	..	..	..	..	..
54	40.07	100	125	..	..	..	..	..	..	..
56	46.18	87	109	..	..	..	..	..	..	..
60	61.06	66	82	..	..	..	..	..	..	..
64	80.72	50	62	..	..	..	..	..	..	..
66	92.77	43	54	..	..	..	..	..	..	..
70	122.5	33	41	..	..	..	..	..	..	..
72	140.7	28	35	..	..	..	..	..	..	..
78	213.1	19	24	..	..	..	..	..	..	..
80	244.7	16	20	..	..	..	..	..	..	..
88	425.0	9	11	..	..	..	..	..	..	..
90	487.9	8	10	..	..	..	..	..	..	..
96	737.7	5	6	..	..	..	..	..	..	..
100	971.8	4	5	..	..	..	..	..	..	..

TABLE 2.

Values of one mile of rails to be equally economical.

L assumed at 4000, and L' "	L' 5000.	L assumed at 4000, and L' "	L' 5000.
Dura'n of iron	a or a' Rate of accrued interest.	Dura'n of iron	a or a' Rate of accrued interest.
1	0.071+	1	0.071+
2	0.147+	2	0.147+
3	0.229+	3	0.229+
4	0.317+	4	0.317+
5	0.411+	5	0.411+
6	0.511+	6	0.511+
7	0.619+	7	0.619+
8	0.734	8	0.734
9	0.858	9	0.858
10	0.990	10	0.990
11	1.132	11	1.132
12	1.283	12	1.283

TABLE 3.
Annual current cost of one mile of rails. Rails of equal economy. Traffic constant.
L = 4000. L' = 5000.

T	T'	r v	r i	r L	r s	r L'
1	8	1194	...	...	710	484
2	16	887	...	...	710	177
3	24	794	...	...	710	84
4	32	754	...	...	710	44
5	40	734	43	691	710	24
6	48	724	168	556	710	14
7	56	718	259	459	710	8
8	64	714	327	387	710	4
9	72	712	382	330	710	2
10	80	711	425	286	710	1
11	88	710	460	250	710	0
12	96	710	489	221	710	0

Comparative economy of Steel Rails and Iron Rails for replacement, taking into account changes in price from 1867 to 1870.

j , value of iron; s , value of steel; q , price of steel when iron replaced; b , value of old rails over expenses; d , depreciation of steel; a , accrued interest; p , price of iron.

$$j = s + \frac{b+d-q}{a+1}$$

In 1867, steel cost.	\$15,000	Iron ..	\$8,500
In 1868, "	14,000	" ..	7,600, $b =$ \$3,500
In 1869, "	12,000	" ..	7,600, $b =$ 3,500
In 1870, "	10,000	" ..	7,400, $b =$ 3,500
After '70	9,000	.....	$b =$ 2,500

Dura'n of iron.	j = value of iron for replacement.	p = j = advantage of steel.
1	5650	2850
2	7912	593
3	9528	—1028
4	10218	—1713
5	10491	—1991
6	10768	—2268
8	11277	—2777
10	11743	—3243
12	12157	—3657

1868.	6517	1083
1	8219	— 619
2	8933	—1332
3	9218	—1613
4	9491	—1891
5	9768	—2163
6	10277	—2677
8	10743	—3143
10	11157	—3657

1869.	5917	1333
1	6655	945
2	6938	667
3	7213	387
4	7491	109
5	7768	— 163
6	8277	— 677
8	8743	—1143
10	9157	—1657

The values of iron for replacement, in the foregoing table, are different from those in Table 2, Col. 3, for the reason that in the latter the price of steel is considered constant, while in this table it is constantly declining.

In these tables the losses preceding and attendant on renewal of iron rails, are assumed at \$4000. With light rails and not very heavy traffic this is ample to cover all inconveniences. With heavy

rails and frequent trains to be interrupted, the cost and inconvenience will be much more. The loss on renewal of steel is assumed to be \$5000. That will depend partly on the cost of new steel, and that on the import duties, which are not yet settled. We have assumed that it will be \$9000 per mile, which contemplates an advance in duties sufficient to counterbalance the decline in premium on gold. The value of worn out steel is as yet quite uncertain. These, like all other data, must be ascertained for each case, and corrected on new information.

The percentage of difference between \$4000 and any other value of L, will also be the percentage of difference between the numbers in third column of table I, and the numbers deduced from such other value.

It is obvious from inspection of table IV, that iron rails to be replaced by steel have heretofore been found more economical than steel; provided, that those laid in 1867 would last two or three years, those laid in 1868, a year or two, and those laid in 1869 half a dozen years.

But in 1870 it is equally obvious that steel is more economical than iron that will last even ten or a dozen years, if our data for the future are at all correct.

As a good iron rail will last several times as long as a poor one, and there is no standard of quality, it is impossible to say how much longer steel will last than iron. It will last more than twenty times as long as much of the iron laid during the during the past ten years. In the tables it is assumed to last eight times as long. On most roads, for the reasons already given, this question is of but little importance.

If the cost of renewal or replacement is a fixed sum, then the difference between the values of iron and steel is also a fixed sum; and there should always be the same difference between the prices. If the cost of renewal is a percentage, the values do and the prices should differ by a percentage.

These formulæ may be used in comparing the ultimate economy of bridges, buildings, vessels, and other things of different cost and durability used for the same purposes.

If single headed rails cost \$7500 and last five years, and double headed, with the chairs they set on, \$10,000 and last twice as long, and if the expenses of renewals are \$4000 and \$5000 respectively, then $p = 7500$, $s = 10000$, $L = 4000$, $L' = 5000$, $a = 0.411$ and $a' = 0.99$ and (neglecting the cost of reversal and constant cost of wedging the double headed.)

$$i = s + \frac{L}{a} - \frac{L'}{a'} = 10000 + \frac{5000}{0.99} - \frac{4000}{0.411} = 10000$$

+ 5051 - 9782 = 5219. So that the double headed has the advantage of $p - i = 7500 - 5219 = 2181$ over the single headed for perpetuation.

Suppose that a wooden bridge will cost \$10,000, and last sixteen years; and that the repairs, insurance, watching, and all expenses on it, with the interest on those expenses up to the time of renewal, and the cost of removal and the inconveniences, all together, amount to \$5000, over the value of the old materials; and that a permanent bridge can then be built at the same cost as at first. Then $i = 10000$, $L = 10000 + 5000 = 15000$ and $s = 2$. Substituting these in the equation

$$v = i + \frac{L}{s}, \text{ we have } 10000 + \frac{15000}{2} = 17500, \text{ equal}$$

to the value of a bridge that will last forever. When the business is very heavy, the inconvenience of renewals, and the risks from fire or accident of temporary structures, are of course controlling considerations. If the interruption caused by the burning of the wooden bridge would involve a loss of \$50,000, and the annual chance of burning is one in a hundred, then the annual risk of \$500 capitalized, adds \$7042 to the difference between the values, making that of the indestructible bridge \$24,542.

As traffic generally increases faster than is expected, (though profits do not) steel rails and permanent structures become more advantageous

than the calculations. They also have the advantage of safely allowing increased weights and speeds, which may become important.

On the other hand, where safety is not involved, and interruption would not cause serious loss, and especially where, (as happens so often in this country,) changes of route or plan are liable to be made, and where calculation makes the ultimate economy nearly equal, it is best to adopt the cheaper rail or structure. This is especially the case in station buildings and shops. Dead capital and outlay for a future generation better able to help itself than we are to help it, are thus avoided.

Our calculations are made on interest a 7 per cent., compounded semi-annually. Few railroad companies borrow at lower rates, many at much higher. Of course the calculations for each road must be based on the actual rate.

The writer having had much occasion to deal with these questions, has arranged the foregoing rules and tables for his own convenience. He presents them for publication, hoping they may sometimes abridge the labor of others who have to deal with the same questions.

Comparisons such as that of the ultimate economy of the wooden and stone bridges are often judged of in this country, though perhaps not often formally made. But an eminent European Engineer told the writer, some years ago, that the idea of such a comparison was entirely new to him.

Union Pacific Railroad.

The earnings, expenses and net profits of the Union Pacific railroad company from May to September, inclusive, in the years 1869 and 1870, were as follows:

	1870. Earnings.	Expenses.	Net Income.
May..	\$802,586 09	\$479,640 61	\$322,945 48
June..	746,450 01	419,151 81	327,298 20
July..	648,058 44	388,850 38	259,208 06
Aug..	664,050 83	349,329 93	314,720 90
Sept..	728,520 93	286,158 16	442,362 77

Total..\$3,584,666 30 \$1,922,630 89 \$1,662,035 41

	1869.		
May..	\$797,948 49	\$512,276 89	\$285,672 10
June..	706,602 69	534,675 72	171,926 97
July..	623,559 96	508,421 56	115,138 40
Aug..	617,585 38	465,443 26	152,142 12
Sept..	758,466 90	425,946 61	332,520 29

Total..\$3,504,163 42 \$2,446,763 64 \$1,057,399 88

Increase in receipts..... \$80,602 88
Decrease in expenses..... 524,132 65

Net increase of profits for five months.\$604,635 58

East Tennessee, Virginia and Georgia R.R.

The report of this company for the year ending June 30, 1870, shows the earnings to be \$1,278,868 80, and ordinary expenses \$716,182 12, leaving net earnings \$562,686 68—from which should be deducted \$146,882 15 for new rails, new cars, wood lands, masonry, etc. The working expenses were 56 per cent. of gross earnings. The road-bed is in fine condition. The assets of the road are \$9,777,034. Its profit account shows \$2,552,957. The road extends from Dalton, Ga., through East Tennessee to the Virginia State line.

The construction of the Shepaug Valley (Conn.) Railroad has been awarded to a Pennsylvania company, for \$370,000. It is the intention to have the road completed during the next season.

The gross funded debt of the City of Savannah, Ga., is \$2,326,280. The resources of the city are \$2,763,980. The value of the taxable real estate is over \$14,600,000, an increase of \$2,500,000 in a year.

MOBILE AND MONTGOMERY RAILROAD COMPANY EIGHT PER CENT. FIRST MORTGAGE BONDS. PRINCIPAL AND INTEREST PAYABLE IN GOLD. INDORSED BY STATE OF ALABAMA.

We offer the above-named Bonds for sale, and, for the following reasons, confidently recommend them as a most desirable investment.

1. THEY ARE A FIRST MORTGAGE UPON A ROAD ALREADY COMPLETED, THOROUGHLY EQUIPPED AND IN SUCCESSFUL OPERATION. The object in placing this Mortgage upon the Road, and of selling these Bonds, is to build an extension of 15 miles from Tensas, the present terminus, into the City of Mobile, which connection is now made by boat. This extension will give entire through Rail connection to Mobile and New Orleans, thus saving the cost and trouble of steamboat service, and delay of breaking bulk both at Tensas and Mobile. The Road, including 15 miles extension, is 182 miles long.

2. THE MORTGAGE IS AT A LOWER RATE PER MILE THAN ANY SIMILAR BOND NOW OFFERING, being for little over \$13,000 per mile—less than the Iron and Rolling Stock are actually worth. The cost of the Road is over \$80,000 per mile.

3. The Road forms the only railroad connection between Montgomery, the capital of the State of Alabama, and Mobile, its chief commercial city, making it exactly the Hudson River Railroad of Alabama, besides being a link in the great through-coast line between New Orleans, Mobile, Montgomery, Savannah, Charleston, Richmond and New York, or the interior line between the same points, via Augusta, Charlotte and Danville.

4. The Net Earnings of the Road have regularly increased at the rate of about 20 per cent. per annum since the organization in 1867, and are NOW much more than enough to pay the interest upon all the bonds authorized to be issued, more than one-half of which are in the hands of the Company. These earnings will be largely increased upon the completion of the Mobile and New Orleans Road, which is to be opened for through travel in about four weeks, and probably more than double upon completion of proposed extension of 15 miles.

5. They are indorsed by the State of Alabama, whose high credit is well known, her 8 per cent. currency bonds now selling at par.

6. They bear 8 per cent. interest, both principal and interest payable in Gold, interest payable semi-annually in the City of New York in May and November.

7. OVER ONE MILLION OF THESE BONDS ARE ALREADY PLACED—a single well-known and careful investor (Judge Onderdonk, of Long Island,) after personal examination of the Road and its resources, taking \$100,000 as a permanent investment, and Executors of Estates and Banking Institutions investing in amounts of from \$20,000 to \$50,000 each.

8. Only \$450,000 are on the market. These are offered by the undersigned at the low price of 95 and accrued interest, in currency.

SOUTTER & CO.,
No. 58 WILLIAM ST.
DREXEL, WINTHROP & CO.,
No. 19 WALL ST.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus (*) are leased roads.	Stock outstanding.	Dividend Periods.	Last Dividend Payable.	Marked thus (*) are leased roads.	Stock outstanding.	Dividend Periods.	Last Dividend Payable.	Marked thus (*) are leased roads.	Stock outstanding.	Dividend Periods.	Last Dividend Payable.
Albany & Susquehanna...100	\$1,774,824	J. & J.	Jul. '69	Hartford and New Haven...100	3,300,000	J. & J.	Oct. '70	Portl., Saco & Portland...100	\$1,500,000	J. & D.	Jun. '70
American Central...100	800,000	J. & J.	Jul. '69	Hannibal and St. Joseph...100	3,000,000	J. & J.	Aug. '70	Providence & Worcester...100	1,800,000	J. & J.	Jul. '70
Atlantic and West Point...100	1,232,200	J. & J.	July '70	Do. pref. 100	6,233,830	J. & J.	Aug. '70	Raleigh and Gaston...100	2,000,000	J. & J.	Jul. '69
Atlantic & N. Carolina...100	5,545,225	J. & J.	July '70	Hanover Branch, Pa. 100	116,850	M. & N.	Nov. '70	Rensselaer and Saratoga...100	3,000,000	A. & O.	Oct. '70
Atlantic & Gt. Western...100	25,879,922	J. & J.	July '70	Housatonic...100	820,000	J. & J.	July '70	Richmond and Danville...100	2,000,000	J. & J.	Jul. '70
Do. pref. 100	1,919,000	J. & J.	July '70	Do. pref. 100	1,180,000	J. & J.	July '70	Richmond and Petersburg...100	847,100	J. & J.	Jul. '70
Atlantic & St. Lawrence...100	2,494,900	M. & S.	Sept. '70	Huntingdon & B'd Top...100	494,380	J. & J.	Jan. '69	Rich, Fred. and Potomac...100	1,041,800	J. & J.	Nov. '67
Augusta and Savannah...100	733,700	J. & J.	Jan. '70	Do. pref. 100	190,750	J. & J.	Jan. '69	Rockport...100	88,400	J. & J.	Nov. '67
Baltimore and Ohio...100	16,161,962	A. & O.	Oct. '70	Illinois Central...100	25,278,710	F. & A.	Aug. '70	Rome, Watert. and O'g'n...100	2,400,000	J. & J.	Jul. '70
Do. Washington Br...100	1,360,000	A. & O.	Oct. '70	Indianapolis, Cin. & Lafay...100	6,185,897	M. & S.	Sept. '70	Rutland preferred...100	2,000,000	F. & A.	Aug. '69
Baltimore City Passenger...100	670,000	F. & A.	Aug. '70	Jefferson, Mad. & Ind...100	2,000,000	J. & J.	Jan. '69	St. L. Alf. and T. Haute...100	2,300,000	J. & J.	Aug. '70
Bay de Noquet & Mar...100	1,250,000	A. & O.	Apr. '68	Joilet and Chicago...100	1,500,000	J. & J.	July '70	St. L. Alf. and T. Haute...100	2,040,000	Annual	June '70
Belvidere Delaware...100	998,250	J. & J.	Oct. '70	Joilet and Chicago...100	300,000	F. & A.	Aug. '70	St. L., Jack'nv. and Chic...100	1,469,429	J. & J.	Jan. '70
Berkshire...100	600,000	J. & J.	Oct. '70	Joilet and Chicago...100	35,000,000	F. & A.	Aug. '70	Sandusky and Cincinnati...100	2,080,000	J. & J.	Nov. '69
Blossburg & Corning...100	280,000	J. & J.	Dec. '69	Lake Shore & Mich. So...100	553,500	F. & A.	Aug. '70	Sand. Mansf. and Newark...100	901,241	J. & J.	Nov. '69
Boston and Albany...100	13,726,100	J. & J.	July '70	Do. guar. 100	1,825,000	J. & J.	Jan. '70	Savannah and Charleston...100	1,000,000	J. & J.	Aug. '68
Boston and Chelsea...100	110,000	A. & O.	Oct. '70	Lackawanna & Bloomsb...100	2,168,566	J. & J.	Jan. '70	Schenck and Susquehanna...100	1,282,150	J. & J.	July '70
Boston, Concord & Mont...100	459,900	M. & N.	Nov. '70	Leeds and Farmington...100	5,739,890	M. & N.	Oct. '70	Second and Third St. (Ph.)...100	203,757	J. & J.	July '70
Do. pref. 100	1,340,400	M. & N.	Nov. '70	Lehigh and Mahanoy...100	16,131,400	J. & J.	Jan. '70	Schenck Valley...100	676,050	J. & J.	Nov. '70
Boston and Lowell...100	1,891,500	J. & J.	July '70	Lehigh and Susquehanna...100	844,650	J. & J.	Jan. '70	Schenck and Rensselaer...100	868,200	M. & N.	Nov. '70
Boston and Maine...100	4,076,974	J. & J.	July '70	Lehigh Valley...100	3,672,400	J. & J.	Jan. '70	Second Avenue (N. Y.)...100	670,000	J. & J.	July '70
Boston and Providence...100	3,870,000	J. & J.	July '70	Lehigh Luzerne...100	2,646,100	J. & J.	July '70	17th & 19th streets (Ph.)...100	180,000	J. & J.	July '70
Broadway (South Boston)...100	400,000	J. & J.	Oct. '70	Little Miami...100	90,000	F. & A.	Aug. '68	Shamokin V. and Pottaw...100	869,450	F. & A.	Feb. '70
Broadway & 7th Av. (N. Y.)...100	2,100,000	J. & J.	June '70	Little Schuylkill...100	300,000	F. & A.	Aug. '70	Shore Line...100	636,200	J. & J.	Jan. '70
Brooklyn City...100	1,000,000	F. & A.	Nov. '69	Lomb. and South St. (Ph.)...100	25,000,000	F. & A.	Aug. '70	Sixth Avenue (N. Y.)...100	750,000	M. & N.	Nov. '70
Brooklyn City & New'n...100	899,800	F. & A.	Jan. '70	Long Island...100	1,021,736	J. & J.	Jul. '69	Somerville...100	75,000	M. & N.	Nov. '70
Buffalo, Bradford & Pitts...100	1,100,000	M. & N.	Nov. '70	Louis, Cin. and Lex...100	848,315	J. & J.	Jul. '70	South Carolina...100	5,819,275	J. & J.	Aug. '68
Buff. New York & Erie...100	960,000	F. & A.	Aug. '70	Louisville and Nashville...100	5,780,501	F. & A.	Jul. '70	South Shore...100	259,685	J. & J.	Aug. '70
Buffalo and Erie...100	5,000,000	F. & A.	Aug. '70	Louis, N. Alb. & Chicago...100	2,500,000	A. & O.	Oct. '70	South Western, Georgia...100	3,399,900	F. & A.	Aug. '70
Cambridge Horse (Boston)...100	727,800	F. & A.	Aug. '70	Lowell and Lawrence...100	200,000	J. & J.	Jan. '70	Staten Island...100	660,000	M. & N.	May '70
Camden and Amboy...100	8,000,000	F. & A.	Aug. '70	Lowell Horse...100	55,880	J. & J.	July '70	Stony Brook...100	287,800	J. & J.	May '70
Camden and Atlantic pref...100	600,000	J. & J.	July '69	Macon and Western...100	2,000,000	M. & N.	Nov. '70	Stoubridge and Indiana...100	1,983,141	J. & J.	Aug. '70
Camden & Burlington Co...100	831,000	J. & J.	July '70	Mahanoy & B'd Mount...100	1,676,918	M. & N.	Nov. '70	Stoubridge & Pittsfield...100	448,700	F. & A.	Aug. '70
Cape Cod...100	721,928	J. & J.	July '70	Maine Central...100	1,611,600	M. & N.	Nov. '70	Syr. Bingham. and N. Y...100	250,000	J. & J.	Jun. '70
Cape May and Millville...100	447,000	J. & J.	June '70	Manchester & Lawrence...100	1,000,000	M. & N.	Nov. '70	Taunton Branch...100	1,314,130	J. & J.	Jun. '70
Catawissa...100	1,160,000	M. & N.	Nov. '70	Marietta & Cincinnati...100	8,029,778	M. & S.	Sept. '68	Tennessee and Alabama...100	596,922	J. & J.	July '70
Catawissa pref...100	2,200,000	M. & N.	Nov. '70	Do. 2d pref. 100	5,120,710	M. & S.	Sept. '68	Terre Haute and Indiana...100	1,983,150	J. & J.	July '70
Cayuga & Susquehanna...100	589,110	J. & J.	July '70	Do. 3d pref. 100	4,460,368	M. & S.	June '69	Third Avenue (N. Y.)...100	1,750,000	J. & J.	May '70
Central of Georgia...100	753,000	M. & N.	Nov. '70	Memphis and Charleston...100	670,000	J. & J.	July '70	Thirteenth and Fif. (Ph.)...100	2,700,000	J. & J.	July '70
Central of New Jersey...100	4,688,300	J. & J.	July '70	Memphis and Ohio...100	1,250,000	J. & J.	July '70	Tol. Peoria and Warsaw...100	1,700,000	J. & J.	January, 1870
Central Ohio...100	15,000,000	J. & J.	June '70	Metropolitan (Boston)...100	11,197,648	J. & J.	Oct. '70	Do. (W. D.) pref. 100	1,200,000	M. & N.	May '70
Do. pref. 100	400,000	J. & J.	June '70	Michigan Central...100	400,000	A. & O.	Jan. '70	Tol. Wabash and West...100	1,000,000	J. & J.	May '70
Chesapeake and Potomac...100	970,000	J. & J.	July '70	Middlesex (Boston)...100	323,371	J. & J.	Feb. '70	Troy and Boston...100	607,111	J. & J.	Jun. '67
Chesapeake pref...100	380,000	J. & J.	July '70	Mill Creek and Minehill...100	405,020	F. & A.	Feb. '70	Troy and Greenbush...100	274,400	J. & J.	Nov. '70
Chesapeake and Albion...100	2,017,928	M. & S.	Sept. '70	Millville and Glassboro...100	405,020	F. & A.	Feb. '70	Union Transport'n (Bos.)...100	200,000	M. & N.	Nov. '70
Chicago and Alton...100	5,141,800	M. & S.	Sept. '70	Milw. & Prairie du Chien...100	7,695,104	Feb. 1870	Union (Phila.)...100	291,475	J. & J.	July '70	
Do. pref. 100	2,426,400	M. & S.	Sept. '70	Milw. & St. Paul...100	9,744,425	Feb. 1870	Utica and Black River...100	834,400	J. & J.	July '70	
Chicago, Bari. & Quincy...100	13,826,025	M. & S.	Mar. '70	M. Hill & Schuylk Haven...100	9,744,425	Feb. 1870	Vermont and Canada...100	2,600,000	J. & J.	June '70	
Chicago, Iowa & Nebraska...100	2,000,000	J. & J.	July '70	Mobile and Ohio...100	3,762,400	J. & J.	Dec. '67	Vermont Central...100	6,000,000	J. & J.	July '70
Chicago and Milwaukee...100	2,227,000	J. & J.	Dec. '69	Montgomery & W. Point...100	1,644,104	J. & J.	July '70	Vermont and Massachusetts...100	2,800,000	J. & J.	July '70
Chicago & N. Western...100	14,590,182	J. & J.	Dec. '69	Morris and Essex...100	7,850,100	J. & J.	July '70	Vicksburg and Meridian...100	867,408	J. & J.	July '70
Do. pref. 100	13,159,097	J. & J.	Dec. '69	Mt. Carbon & Ft. Carbon...100	282,550	M. & N.	Nov. '70	Virginia Central...100	2,363,879	J. & J.	July '70
Chicago, R. I. & Pacific...100	16,000,000	A. & O.	Oct. '70	Nashua and Lowell...100	720,000	M. & N.	Nov. '70	Western Union...100	4,707,692	F. & A.	Aug. '70
Cin. Ham. & Dayton...100	3,500,000	A. & O.	Apr. '70	Nashville & Chattanooga...100	2,056,544	F. & A.	Feb. '70	West Jersey...100	1,909,000	J. & J.	July '70
Cincinnati City Passenger...100	1,000,000	J. & J.	Jan. '70	Naugatuck...100	1,496,600	J. & J.	July '70	West Philadelphia...100	249,100	J. & J.	July '70
Do. Street...100	428,648	M. & N.	Nov. '70	New Bedford & Taunton...100	500,000	J. & J.	Jan. '69	Wilm. and Weldon...100	1,468,776	J. & J.	July '70
Cin. Sand. & Clev. pref...100	192,750	J. & J.	July '70	New Haven & N. London...100	738,538	J. & J.	Aug. '70	Winchester and Potomac...100	1,547,650	J. & J.	July '70
Citizens Passenger (Phila.)...100	10,460,000	F. & A.	Aug. '70	N. Haven & Northampton...100	1,344,000	F. & A.	Oct. '70	Worcester and Nashua...100	1,522,600	J. & J.	Jul. '70
Clev. Col. Cin. & Ind...100	2,060,400	M. & N.	Nov. '70	New Jersey...100	6,250,000	F. & A.	Oct. '70	Chesapeake and Delaware...100	1,818,983	J. & J.	June '70
Cleveland & Mahoning...100	5,968,775	F. & A.	Nov. '70	New London Northern...100	895,000	A. & O.	Oct. '70	Chesapeake and Ohio...100	6,228,586	F. & A.	Aug. '70
Cleveland and Toledo...100	5,000,000	F. & A.	Aug. '70	N.Y. Central & Hudson R...100	45,000,000	A. & O.	Oct. '70	Delaware Division...100	1,633,360	F. & A.	Aug. '70
Col. Ohl. & Indiana Can...100	10,460,900	J. & J.	June '70	Certificates 100	44,000,000	A. & O.	Oct. '70	Delaware and Hudson...100	10,000,000	F. & A.	Aug. '70
Columbus and Xenia...100	1,786,200	J. & J.	June '70	New York and Harlem...100	5,000,000	J. & J.	July '70	Delaware and Raritan...100	2,621,800	F. & A.	Aug. '70
Concord...100	1,500,000	M. & N.	Nov. '70	Do. pref. 100	1,600,000	J. & J.	July '70	Erie of Pennsylvania...100	64,000	M. & N.	May '67
Concord & Portland...100	850,000	J. & J.	July '70	New York & New Haven...100	9,000,000	J. & J.	July '70	Lehigh Coal and Navigat...100	8,789,800	J. & J.	July '70
Coney Island & Brooklyn...100	800,000	J. & J.	July '70	N. Y. Provid. & Boston...100	2,000,000	J. & J.	July '70	Monongahela Navigation...100	728,100	F. & A.	Feb. '70
Conn. & Passumt. Rivers...100	189,000	F. & A.	Aug. '70	Nlag. Bridge & Cananda...100	1,000,000	J. & J.	July '70	Morris (consolidated)...100	1,025,000	F. & A.	Feb. '70
Do. pref. 100	1,822,100	F. & A.	Aug. '70	Ninth Avenue...100	797,400	J. & J.	July '70	Do. (preferred)...100	1,176,000	F. & A.	Feb. '70
Connecticut River...100	1,700,000	J. & J.	July '70	Norfolk & Petersburg guar...100	137,600	J. & J.	July '70	Schuyl. Navigation (cons)...100	4,300,000	F. & A.	Feb. '70
Cumberland Valley...100	1,816,900	A. & O.	Apr. '70	Norfolk & Petersburg...100	4,000,000	A. & J.	July '70	Suag. and Tide Water...100	2,907,850	J. & J.	Oct. '67
Danbury and Newrw...100	400,000	M. & N.	Nov. '70	North Carolina...100	6,000,000	M. & N.	Nov. '70	Union...100	2,907,850	J. & J.	Oct. '67
Dayton and Michigan...100	2,890,648	J. & J.	July '70	Northern Central...100	155,000	J. & J.	July '70	W. Branch and Susq...100	1,100,000	J. & J.	Oct. '67
Delaware...100	594,280	J. & J.	July '70	North Eastern (S. C.) pref...100	100,000	J. & J.	July '70	Wyoming Valley...100	800,000	J. & J.	Oct. '67
Del. Lackaw. & Western...100	13,386,020	J. & J.	July '70	Northern of N. Hampsh...100	3,008,400	J. & J.	July '70	MISCELLANEOUS.			
Des Moines Valley...100	1,820,200	J. & J.	July '70	North Pennsylvania...100	3,150,150	J. & J.	July '70	Pacific Mail Steamship...100	20,000,000	M. & S.	Sept. '69
Detroit & Milwaukee...100	452,350	J. & J.	July '70	Norwich & Worcester...100	2,383,600	J. & J.	Aug. '70	West'n Union Telegraph...100	41,068,000	J. & J.	Jan. '70
Do. pref. 100	2,095,000	J. & J.	July '70	Ogdensb. & L. Champ'n...100	8,040,900	J. & J.	Aug. '70	American Coal...100	1,500,000	M. & S.	Mar. '70
D. Dock, E. B'dw. & Bat...100	1,300,000	F. & A.	May '70	Ohio and Mississippi...100	1,994,900	A. & O.	Oct. '70	Ashburton...100	2,000,000	J. & J.	Dec. '69
Dubuque and Sioux City...100	1,678,641	J. & J.	July '70	Do. pref. 100	20,000,000	J. & J.	Oct. '70	Butler Coal...100	25,000,000	J. & J.	Dec. '69
Do. pref. 100	1,987,351	J. & J.	July '70	Oil Creek & Allegheny R...100	3,500,000	J. & J.	Oct. '70	Central Coal...100	2,000,000	J. & J.	Dec. '69
East Mahanoy...100	392,550	J. & J.	July '70	Old Colony & Newport...100	4,848,320	J. & J.	July '70	Fulton Coal...100	2,000,000	J. & J.	Dec. '69
Eastern (Mass.)...100	3,883,300	J. & J.	July '70	Orange and Newark...100	281,550	F. & A.	Aug. '70	Lackawanna Coal...100	200,000	J. & J.	Jan. '70

RAILROAD EARNINGS—MONTHLY.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Central Pacific (in gold):													
1937.....	38,199	51,831	60,029	81,166	96,828	121,702	174,812	181,297	200,550	212,109	128,166	75,871	1,400,000
1938.....	64,493	86,937	81,396	96,481	106,835	164,729	269,590	261,832	262,770	293,422	286,562	342,743	2,300,000
1939.....	212,604	218,982	291,308	485,048	568,270	556,080	532,657	511,854	600,788	579,642	535,366	410,000	4,670,832
1940.....	418,104	394,176	488,338	633,753	768,720	729,274	784,099	806,040	833,418	.....	.....	.....	.....
Chicago and Alton:													
1937.....	109,850	101,355	104,372	122,084	132,301	145,542	149,137	157,948	170,044	170,910	156,869	158,294	1,678,706
1938.....	100,991	154,418	195,808	162,723	178,756	206,090	224,257	312,165	354,554	320,870	307,808	252,015	2,770,484
1939.....	276,238	299,063	299,063	268,480	322,278	355,270	335,985	400,251	401,280	357,956	307,019	236,824	3,840,092
1940.....	226,153	222,241	290,111	269,249	329,851	371,544	321,597	387,269	322,638	360,223	323,080	271,247	3,608,153
1937.....	243,797	157,832	235,961	282,165	335,510	342,358	354,244	415,982	408,999	426,752	369,102	330,166	3,892,861
1938.....	276,117	276,140	267,094	270,121	303,342	384,504	404,012	558,101	486,196	503,746	409,569	361,701	4,608,643
1939.....	343,182	315,099	388,727	328,390	345,833	402,854	551,045	493,232	506,623	468,312	397,515	340,861	4,681,568
1940.....	293,978	323,825	344,366	334,658	395,044	411,986	421,485	501,049	493,635	.....	.....	.....	.....
Chicago, Rock Island and Pacific:													
1937.....	140,024	130,225	122,512	126,798	144,995	170,937	139,142	160,306	210,729	216,080	196,435	201,134	1,966,267
1938.....	175,482	243,150	185,013	198,679	243,178	224,980	307,874	375,860	324,865	336,617	321,087	321,087	3,066,470
1939.....	246,331	289,403	196,680	234,612	321,818	244,121	306,231	389,489	307,523	270,073	201,779	201,779	3,313,514
1940.....	241,295	183,385	257,230	209,099	271,506	306,693	238,926	317,977	400,941	428,474	346,028	260,268	3,466,022
1937.....	292,047	224,621	272,454	268,369	267,625	276,681	297,513	444,024	566,403	569,549	442,275	377,053	4,358,614
1938.....	308,587	297,464	276,431	301,052	316,709	378,436	341,835	568,380	558,387	501,209	424,589	433,435	4,797,464
1939.....	333,319	308,208	398,740	388,386	449,982	523,841	455,607	682,652	736,555	584,156	479,236	398,468	5,684,106
1940.....	401,275	449,655	500,393	443,300	507,900	529,512	462,400	556,100	579,600	.....	.....	.....	.....
Chicago and Northwestern:													
1937.....	273,677	317,839	390,355	421,363	468,830	565,145	480,710	519,306	669,605	729,759	716,378	668,400	6,114,566
1938.....	482,164	499,296	468,358	585,623	747,942	702,691	767,508	946,707	832,683	754,671	647,942	547,942	7,976,490
1939.....	523,566	399,917	523,485	537,519	588,948	925,983	808,524	797,475	1,000,086	1,200,216	1,010,892	712,369	9,299,430
1940.....	696,147	574,664	766,896	774,280	896,712	893,658	888,214	1,063,237	1,448,942	1,541,057	1,211,530	879,900	11,632,739
1937.....	724,890	807,478	850,192	1,094,597	1,211,150	1,180,933	1,076,674	1,251,940	1,507,479	1,570,067	1,107,084	1,001,937	13,884,471
1938.....	892,068	830,287	1,142,166	1,112,190	1,268,444	1,251,951	1,157,056	1,037,974	1,306,673	1,371,780	1,140,145	845,708	13,356,467
1940.....	706,025	753,782	858,369	929,077	1,177,597	1,139,284	1,034,393	1,227,513	1,269,282	.....	.....	.....	.....
Cleveland, Col., Cin. and Indianapolis:													
1937.....	242,200	236,160	242,500	236,435	193,959	203,696	218,347	271,425	267,451	293,296	262,799	230,061	2,918,342
1938.....	190,840	239,522	247,661	241,456	259,408	283,867	341,783	320,025	293,615	271,556	242,621	201,621	3,095,955
1940.....	201,600	218,600	244,161	246,046	260,169	274,021	249,355	319,012	317,887	.....	.....	.....	.....
Illinois Central:													
1937.....	190,130	236,637	181,094	191,648	206,246	269,282	261,079	352,786	414,543	410,336	372,593	359,463	3,445,827
1938.....	299,944	271,085	275,648	289,224	334,687	407,992	343,929	511,305	478,576	496,433	437,979	424,531	4,571,028
1939.....	327,900	416,588	469,782	423,797	406,873	510,100	423,678	640,179	799,236	661,391	657,141	603,402	6,339,447
1940.....	571,636	528,972	616,665	616,665	490,873	617,682	578,403	747,469	739,736	641,689	643,887	518,088	7,111,208
1937.....	608,053	506,266	506,465	411,605	569,250	567,679	490,696	578,253	571,348	661,971	558,210	504,066	6,546,741
1938.....	647,120	524,871	417,071	440,271	477,027	516,493	525,242	709,327	738,530	828,901	727,810	618,329	7,190,962
1939.....	687,446	686,165	444,448	518,800	572,551	626,249	549,714	794,326	889,967	981,530	686,401	681,041	7,817,629
1940.....	660,138	694,695	709,645	668,282	640,975	778,251	696,226	641,363	979,401	914,406	814,412	696,877	8,823,482
1937.....	654,587	668,391	644,374	597,571	606,253	759,215	645,768	861,358	870,584	.....	.....	.....	.....
Marietta and Cincinnati:													
1937.....	90,411	85,447	84,351	81,181	96,858	103,373	95,043	106,921	104,866	113,504	112,962	123,802	1,201,239
1938.....	94,136	78,976	92,910	92,768	90,626	96,686	106,694	114,716	121,217	142,823	132,387	123,383	1,275,713
1939.....	92,438	81,699	98,482	108,481	95,416	95,924	108,413	126,556	121,619	125,065	119,169	121,408	1,294,095
1940.....	96,517	91,666	108,558	109,526	111,083	118,465	114,496	129,388	140,473	182,869	181,019	109,639	1,390,822
1937.....	90,177	95,275	101,379	106,246	110,218	111,117	111,127	118,407	132,998	.....	.....	.....	.....
Michigan Southern & Northern Indiana:													
1937.....	266,600	304,445	338,454	330,651	287,126	315,258	278,591	358,862	402,219	407,107	448,934	411,506	4,120,159
1938.....	363,996	363,996	413,974	366,180	361,489	387,095	301,613	418,575	486,808	524,760	495,072	351,799	4,828,762
1939.....	312,846	277,234	413,974	413,974	413,974	413,974	413,974	413,974	413,974	413,974	413,974	413,974	4,650,328
1940.....	305,857	311,088	396,372	396,372	396,372	396,372	396,372	396,372	396,372	396,372	396,372	396,372	4,663,508
1937.....	382,021	382,021	382,021	382,021	382,021	382,021	382,021	382,021	382,021	382,021	382,021	382,021	4,961,158
1938.....	1,006,998*	890,698*	1,140,000*	473,544	445,132	408,139	727,046*	898,777*	1,259,725*	1,279,602*	1,124,745*	1,048,272*	.....
1940.....	931,873*	1,006,961*	1,162,697*	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Michigan Central:													
1937.....	230,150	159,658	151,902	175,696	186,039	174,002	172,189	216,624	295,956	322,369	307,474	258,634	2,650,702
1938.....	242,073	245,868	236,432	238,466	236,463	206,221	193,325	216,449	308,168	375,488	339,794	306,136	3,168,066
1939.....	252,435	278,848	348,802	338,276	271,653	265,780	283,244	346,781	408,445	410,802	405,610	379,470	3,970,946
1940.....	306,324	279,137	344,228	337,241	401,456	366,068	329,106	413,601	476,661	490,694	447,970	328,870	4,520,660
1937.....	282,489	268,796	337,158	343,737	336,186	335,058	324,956	369,646	429,181	493,640	414,604	308,669	4,230,118
1938.....	304,095	283,661	376,210	362,783	333,952	284,977	315,021	399,963	464,778	506,296	412,934	306,578	4,871,072
1939.....	343,316	304,315	326,880	415,768	399,236	325,501	321,013	392,942	466,973	511,820	410,826	390,671	4,606,261
1940.....	334,120	320,636	398,627	411,514	403,646	366,623	329,950	353,669	478,646	490,772	448,419	374,542	4,745,104
1937.....	337,992	329,128	380,430	412,030	403,253	365,187	325,891	378,880	467,990	.....	.....	.....	.....
Minneapolis and St. Paul:													
1937.....	319,763	240,755	261,143	316,266	401,900	369,356	365,412	350,565	761,738	1,101,771	775,616	438,333	5,683,908
1938.....	339,228	339,228	339,228	456,412	665,718	458,191	423,388	622,692	1,024,045	1,087,464	558,917	468,890	6,517,668
1939.....	454,590	330,400	430,861	460,288	680,844	678,923	686,531	625,547	724,732	1,040,102	801,136	596,063	7,250,669
1940.....	396,171	382,823	377,000	443,132	730,700	755,737	696,434	661,020	808,818	.....	.....	.....	.....
North Missouri:													
1937.....	119,721	94,927	136,263	149,184	139,000	150,416	160,149	155,586	231,662	.....	.....	.....	.....
1938.....	218,101	196,207	239,161	269,490	269,000	205,493	196,724	229,099	264,690	.....	.....	.....	.....
Ohio and Mississippi:													
1937.....	210,329	200,465	309,261	269,444	224,963	223,242	268,177	302,596	332,400				

NATIONAL AND STATE SECURITIES.

* Indicates that no interest is paid.							* Indicates that no interest is paid.						
National Securities Oct 1, 1870.		Amounts outstanding.	Rate.	Payable.	WHEN PAY-ABLE.	Market Price.	Massachusetts—Western R. R. Loan, sterling		Amounts outstanding.	Rate.	Payable.	WHEN PAY-ABLE.	Market Price.
Loan of June 14, 1868	registered coupon	\$20,000,000	5	Jan. & July.	1874	107 1/2	3,578,696	5	April & Oct.	'69-'88	100		
Loan of June 22, 1860	registered coupon	7,022,000	5	"	1871	108 1/2	3,568,580	5	"	'88-'90	98		
Loans of Feb. 8, July 1, Aug. 3, '61	registered coupon	282,783,100	5	"	1871	108 1/2	1,166,500	5	Jan. & July.	'69-'71	100		
and March 8, 1863	coupon		5	"	1881	112 1/2	200,000	5	"	1877	100 1/2		
Oregon War Bonds of March 2, 1861		945,000	5	"	1881	108 1/2	400,000	5	"	1900	100		
			5	"	1881	108 1/2	290,400	5	Various.	1870	100		
Loan of Feb. 26, 1862	(5-20s) registered	497,179,850	5	July.	1881	108	171,000	5	"	1872	100		
	(5-20s) coupon		5	May & Nov.	1882	108	117,000	5	April & Oct.	1873	100		
Loan of March 3, 1864	(5-20s) registered	\$1,129,100	5	"	1882	108 1/2	125,000	5	Various.	1874	100		
	(5-20s) coupon		5	"	1884	107 1/2	244,000	5	June & Dec.	'70-'72	100		
Loan of June 30, 1864	(5-20s) registered	108,968,600	5	"	1884	107 1/2	162,000	5	"	1877	100 1/2		
	(5-20s) coupon		5	"	1884	107 1/2	50,000	5	Jan. & July.	1871	112 1/2		
Loan of March 3, 1865	(5-20s) registered	187,776,750	5	"	1885	108 1/2	200,000	5	"	'72-'78	100 1/2		
	(5-20s) coupon		5	"	1885	107 1/2	650,000	5	"	'74-'76	100		
	2d series (5-20s) registered	277,011,900	5	Jan. & July.	1886	110 1/2	720,000	5	"	1876	100		
	(5-20s) coupon		5	"	1886	110	1,430,000	5	"	'77-'78	100		
	2d series (5-20s) registered	344,140,200	5	"	1887	110 1/2	600,000	5	May & Nov.	1880	98		
	(5-20s) coupon		5	"	1887	110 1/2	220,000	5	Jan. & July.	1888	96 1/2		
	4th series (5-20s) registered	39,678,250	5	"	1888	110 1/2	200,000	5	May & Nov.	1894	96 1/2		
	(5-20s) coupon		5	"	1888	110 1/2	4,379,500	5	"	1894	96 1/2		
Loan of March 3, 1864	(10-40s) registered	194,567,800	5	Mar. & Sept.	1904	107	888,000	5	Jan. & July.	1888	100 1/2		
	(10-40s) coupon		5	"	1904	107	3,505,000	5	Mar. & Sept.	1896	100 1/2		
Pacific R. R. Bonds	(currency)	64,618,632	5	Jan. & July.	'96-'99	111 1/2	912,324	5	Var.	3 yrs.	100		
Certificates of Mar. 2, 1867, and July 25, 1868		45,135,000	3	"	Dem.		86,000	5	Jan. & July.	1879	100		
Navy Pension Fund of July 23, 1868		14,000,000	3	"	Dem.		200,000	5	"	1878	96 1/2		
Loans of 1842, 1847 and 1848		34,050	5	"	Due.		1,728,000	5	"	'78-'88	100		
Texas Indemnity Bonds of Sept. 9, 1860		242,000	5	"	Due.		896,000	7	"	1886	100		
Treasury Notes prior to 1857		89,625	5	"	Due.		463,000	7	May & Nov.	1890	101		
Treasury Notes of 1857, '61 and '63		286,225	var	"	Due.		2,276	7	Jan. & July.	1883	100		
Treasury Notes (7-30s)		594,850	7.3	"	Due.		7,000,000	6	Jan. & July.	'41-'71	100		
Certificates of Indebtedness		5,000	5	"	Due.		463,000	6	Jan. & July.	'62-'90	91 1/2		
Compound Interest Notes of 1863 and 1864		2,054,500	var	"	Due.		2,830,000	6	"	1887	100		
Temporary Loan of June 30, 1864		180,810	var	"	Due.		13,734,000	6	"	'82-'90	100		
U. S. Notes (greenbacks)		358,103,971	var	"	Due.		1,689,000	7	"	'81-'87	91		
Fractional Currency		39,641,184	var	"	Due.		3,000,000	6	"	'81-'86	91		
State Securities, interest dates.							Nebraska—(No Account)						
Alabama—State Bonds		168,900	5	May & Nov.	1872	72	Nevada—(No Account)						
	(extended)	2,414,800	5	"	'83-'85		New Hampshire—War Loan of July 1, 1861						
	(sterling)	770,500	5	Jan. & July.	'70-'80			1,089,800	6	Jan. & July.	'69-'78	90 1/2	
	(extended)	782,800	5	"	1886			600,000	6	Mar. & Sept.	'84-'89	90 1/2	
	(new)	680,200	5	"	'94-'95	100 1/2		1,267,000	6	April & Oct.	'69-'74	90 1/2	
Arkansas—State Funded Debt Bonds		4,800,000	6	Jan. & July.	18 9	62		500,000	8	Jan. & July.	1869	100	
	Aid Bonds	1,500,000	7	April & Oct.	1899	75	New Jersey—War Loan of 1861 (free)						
California—Civil Bonds of 1867		8,066,500	7	Jan. & July.	1877	112		1,002,900	6	Jan. & July.	'60-'84	100 1/2	
	1860	177,500	7	"	1880			693,409	6	"	'86-'96	100	
	Soldiers' Relief Bonds	470,500	7	"	'83-'85			700,000	7	J. A. J. & O.	1870	110	
	Bounty Bonds	982,000	7	"	'83-'86			800,000	6	"	1878	100	
Connecticut—War Bonds, My '61, (10 or 20yr)			6	Jan. & July.	'71-'81	101 1/2		900,009	5	"	1875	100	
	Oct. '61, (10 or 20yr)		6	"	'72-'82			348,107	5	"	pleas.	100	
	Nov. 1863		6	"	1883			2,607,200	6	J. A. J. & O.	1872	100 1/2	
	My '64, (10 or 20yr)		6	April & Oct.	'74-'78			6,726,800	6	"	1873	107	
	May 1, 1866, (free)		6	"	1885			2,250,000	6	"	1874	100	
	(various) registered	867,500	6	Various.	Var.			500,000	6	"	1875	100	
Florida—State Bonds		500,000	5	Jan. & July.	Var.			900,000	6	"	1877	100	
			5	"	1885			2,035,800	5	"	1874	100	
Georgia—State Bonds (W. & A. R. R.)		100,000	7	Jan. & July.	1870	90 1/2		3,757,000	7	Jan. & July.	1877	100	
	(Act March 12, 1866)	3,164,500	7	May & Oct.	1870			22,186,000	7	"	1877	100 1/2	
	(W. & A. R. R.)	1,519,000	6	Jan. & July.	1886			8,511,000	6	J. & J. O. & A. O.	'69-'91	48	
	(Atl. and Gulf R. R.)	784,000	6	May & Oct.	1874	81		3,959,045	6	"	'92-'98	27 1/2	
	(sterling)	72,000	6	Feb. & Aug.	'78-'80			3,200,000	6	Jan. & July.	1900	100	
Illinois—New Internal Improvement Stock		1,686,954	6	Mar. & Sept.	1869			2,439,900	6	Jan. & July.	1898	100	
	Interest Bonds	998,649	6	Jan. & July.	1870			2,026,171	6	Jan. & July.	1870	100	
	Liquidation Bonds	198,400	6	"	1877	100 1/2		1,600,000	6	"	1876	102	
	Refunded Stock	985,900	6	"	1865			4,095,309	6	"	1881	102	
	Thornton Loan Bonds	104,000	6	"	1869	100		2,400,000	6	"	1886	102 1/2	
	War Loan Bonds	543,200	6	"	1879			400,000	6	May & Nov.	1871	100	
	Ill. and Mich. Canal	792,222	6	"	1870	100		94,015	6	Jan. & July.	1884	100	
	(sterling) registered	535,387	6	"	1870			82,142	7	"	1874	100	
Indiana—State Stock		2,822,925	6	Jan. & July.	1866			2,797,910	5	Various.	Due.	100	
	War Loan Bonds	210,000	6	May & Nov.	1883			1,642,128	5	Jan. & July.	1870	100	
Iowa—State Bonds of 1868		200,000	7	Jan. & July.	1868			4,724,000	5	Various.	'72-'82	100 1/2	
	War and Defense Bonds of 1861	300,000	7	"	1881			112,000	4	Jan. & July.	1882	100	
Kansas—War Bonds, 1861-'67		760,000	7	Jan. & July.	'76-'97			400,000	6	April & Oct.	1879	100	
	Territorial Debt Bonds	100,000	6	July.	'83-'84			4,907,150	6	Feb. & Aug.	1872	104	
Kentucky—State Bonds		1,421,000	6	April & Oct.	'71-'72	99		7,909,600	6	"	1877	100 1/2	
		339,000	6	May & Nov.	1879			9,273,050	6	"	1882	100 1/2	
	Military Bonds	160,000	6	April & Oct.	'69-'73			910,200	5	"	'72-'87	100 1/2	
Louisiana—State Bonds (Schools, &c.)		635,000	6	Various.	'80-'93			2,820,750	6	"	1871	100 1/2	
	(Railroads)	684,508	6	Jan. & July.	1868			30,500	6	April & Oct.	1871	104 1/2	
	(Charity Hospital)	86,000	6	Various.	'69-'90	70		1,157,000	6	Mar. & Sept.	1882	100	
	(Levees)	1,000,000	6	Mar. & Sept.	1872			214,000	6	April & Oct.	1883	99 1/2	
	(1867)	2,414,000	6	Various.	1886	76		775,000	6	Jan. & July.	1893	99 1/2	
	(1868)	5,000,000	6	May & Nov.	1907			851,000	6	Feb. & Aug.	1894	99	
	(Funding)	494,830	6	Various.	'66-'88	60 1/2		314,454	6	J. A. J. & O.	1870	101 1/2	
Maine—Civil Loans		250,000	6	Mar. & Sept.	'69-'74			484,445	6	"	1865	80	
		171,000	6	Various.	'76-'78	97 1/2		2,886,000	6	Jan. & July.	'71-'90	100	
	War Loan of 1861	800,000	6	Mar. & Sept.	1871	100		1,000,000	6	"	'75-'79	100	
	1862	525,000	6	June & Dec.	1889	97 1/2		1,282,971	6	"	'70-'90	100	
	1864	2,882,000	6	Feb. & Aug.	1880	93 1/2		1,598,840	6	April & Oct.	Var.	67	
	Bounty Loan of 1863	476,000	6	J. A. J. & O.	1865	93 1/2		289,180	6	"	"	62	
Maryland—Sterling Bonds of 1863		602,000	5	"	'69-'90			1,706,000	6	Jan. & July.	long.	62	
	converted	1,214,680	5	"	1880	96 1/2		25,908,000	6	"	Var.	60 1/2	
	Currency Bonds of 1857	269,000	5	"	1880	96 1/2		2,172,000	6	"	"	60 1/2	
	1857-'58	24,000	5	"	'70-'85	96		4,677,950	6	"	"	60 1/2	
	1858-'59	1,438,428	5	"	'69-'99	96 1/2							
	1859-'60	525,008	5	"	1880	79							
	1860-'61	46,232	5	"	1883	103							
	Defense Loan of 1864-'65	2,040,100	5	"	1878								
	South Relief Loan of 1867	109,000	5	"									

AMERICAN RAILROAD BOND LIST.

An Asterisk (*) affixed to rate of interest signifies "Payable in Coin."

Description of Bonds.	Amount.	Rate.	Interest Payable.		Due.	Price.	Description of Bonds.	Amount.	Rate.	Interest Payable.		Due.	Price.
			When.	Where.						When.	Where.		
Adirondack:							Catawissa:						
1st Mortgage.....	\$915,000	7	Jan. & July.	New York.	1886	....	1st Mortgage.....	\$371,000	7	Feb. & Aug.	Philadelphia.	1882	97
Albany and Susquehanna:							Cedar Falls and Minnesota:						
1st Mortgage.....	1,000,000	7	Jan. & July.	New York.	1888	....	1st Mort. (C. F. to Waver. 14 m.)	294,000	7	April & Oct.	New York.	1885	84
Albany City Loan.....	1,000,000	6	May & Nov.	"	1895	....	1st Mort. (W. to Minn. L. 67 m.)	1,407,000	7	Jan. & July.	"	1887	...
2d Mortgage for \$2,000,000.....	2,000,000	7	April & Oct.	"	1885	93	Cedar Rapids and Missouri River:						
3d Mortgage.....	175,000	7	May & Nov.	"	1889	....	1st Mortgage.....	3,586	7	Jan. & July.	New York.	1916	88
Allegheny Valley:							Central Branch Union Pacific:						
General Mortgage.....	3,785,000	7.3	Jan. & July.	New York.	1896	....	1st Mort. (Atchison & Pike's P.)	1,600,000	6*	May & Nov.	New York.	'95-'96	...
1st Mortgage Eastern Ex.....	59,000	...	...	...	...	....	2d Mortgage Govern'm't subsidy.	1,600,000	6	Jan. & July.	"	'95-'96	...
Bonds to State of Pennsylvania.	3,500,000	...	...	...	...	....	Central of Georgia:						
Androscooggin:							1st Mortgage.....	786,000	7	March & Sept.	Savannah.	1875	98
1st Mortgage.....	425,000	6	April & Oct.	Portland.	1890	....	Central of New Jersey:						
Atlantic and Great Western:							1st Mortgage.....	900,000	7	Feb. & Aug.	New York.	1870	100
1st Mortgage (New York).....	7*	7*	April & Oct.	London.	1879	....	2d Mortgage.....	600,000	7	May & Nov.	"	1875	103
1st Mortgage (Pennsylvania).....	7*	7*	"	"	1877	....	New Loan for \$5,000,000.....	1,500,000	7	Feb. & Aug.	"	1890	101
1st Mortgage (Ohio).....	6,000,000	7*	"	New York.	1876	....	Central Ohio:						
1st Mortgage (Franklin Branch)	7*	7*	June & Dec.	London.	1882	....	1st Mortgage.....	2,500,000	6	March & Sept.	New York.	1890	84
1st Mortgage (Buffalo Extension)	7*	7*	April & Oct.	"	1884	....	Central Pacific of California:						
1st Mortgage (Silver Creek Br.)	7*	7*	March & Sept.	"	1884	....	1st Mortgage (on 725 m.) free.....	26,010,000	6*	Jan. & July.	New York.	1895	91
2d Mortgage (New York).....	3,000,000	7*	April & Oct.	New York.	1881	....	2d Mortgage (paid by Cal.).....	1,500,000	7*	"	"	1885	...
2d Mortgage (Pennsylvania).....	3,000,000	7*	Jan. & July.	London.	1882	....	Convertible bonds.....	1,500,000	7*	"	"	1883	100
2d Mortgage (Ohio).....	20,000,000	7*	April & Oct.	"	1883	....	National Loan.....	26,010,000	6	"	"	1895	...
1st Consolidated Mortgage.....	7,000,000	5*	"	"	1885	....	Charlotte and South Carolina:						
2d Consolidated Mortgage.....	8,701,806	7*	"	"	1885	....	1st Mortgage for \$500,000.....	334,000	7	Jan. & July.	New York.	1880	...
Income Mortgage.....	2,000,000	—	& —	New York.	1898	....	Cheraw and Darlington.....	150,000	7	Jan. & July.	Charleston.	1870	...
Atlantic and Gulf:							1st Mortgage.....	150,000	7	Jan. & July.	Charleston.	1870	...
1st Mortgage Consolidated.....	1,500,000	6	Various.	B. & N. Y.	'68-'70	99 1/2	Chesapeake and Ohio (Va. Cent.):						
Atlantic and St. Lawrence:							1st Mortgage for \$15,000,000.....	6*	May & Nov.	New York.	1900	90	
Portland City Loan (sfg fund).....	1,614,500	6	April & Oct.	Portland.	1866	....	Cheshire:						
2d Mortgage.....	885,500	6*	May & Nov.	London.	1866	....	Company bonds.....	771,800	6	Jan. & July.	Boston.	'75-'80	98
2d Mortgage, sterling.....	484,000	6*	May & Nov.	London.	1878	....	Chester Valley:						
Sterling Loan.....	863,250	6	Jan. & July.	Baltimore.	1875	94 1/2	1st Mortgage.....	500,000	7	May & Nov.	Philadelphia.	1872	61
Baltimore and Ohio:							Chicago and Alton:						
Loan of 1855.....	579,500	6	"	"	1880	94	1st Mortgage, pref. sinking fund.	356,000	7	May & Nov.	New York.	1877	97
Loan of 1850.....	1,710,500	6	April & Oct.	"	1885	92	1st Mortgage.....	2,383,000	7	Jan. & July.	"	1893	100
Baltimore City Loan of 1855.....	5,000,000	6	Jan. & July.	"	1890	...	Income bonds (2d Mortgage).....	1,078,000	7	April & Oct.	"	1883	90
Northwestern Va. R. R. 2d Mort.	458,500	6	"	"	1873	...	Chicago, Burlington and Quincy:						
Northwestern Va. R. R. 3d Mort.	140,000	6	"	"	1885	...	Trust Mortgage.....	2,876,000	8	Jan. & July.	New York.	1883	110
Bay de Noquet and Marquette:							Trust Mortgage, convertible.....	150,000	8	"	"	1883	...
1st Mortgage Income.....	250,000	8	April & Oct.	New York.	'70-'71	...	2d Mortgage.....	941,000	4 1/2	July.	Frankfort.	1890	...
Bellefontaine:							Company bonds.....	400,000	7	March & Sept.	New York.	1890	...
1st Mortgage (B. and Ind. R.R.)	791,000	7	Jan. & July.	New York.	'70-'90	...	Chicago, Cincinnati and Louisv.:						
Bellefonte and Snow Shoe:							1st Mortgage for \$1,000,000.....	400,000	7*	Jan. & July.	New York.	1887	...
1st Mortgage.....	99,000	6	Jan. & July.	Philadelphia.	1876	....	Chicago and Great Eastern:						
Belvidere Delaware:							Construction.....	400,000	7	April & Oct.	New York.	1895	...
1st Mortgage (guar. by C. & A.)	1,000,000	6	June & Dec.	New York.	1877	85	Income.....	300,000	7	"	"	1895	41
2d Mortgage (guar. by C. & A.)	500,000	6	March & Sept.	Princeton.	1885	87	Chicago, Danville and Vincennes:						
3d Mortgage (guar. by C. & A.)	745,000	6	Feb. & Aug.	"	1887	85	1st Mortgage S. F.....	2,500,000	7*	April & Oct.	New York.	1909	95
Blue Ridge, S. Car.:							Chicago, Iowa and Nebraska:						
1st Mortgage of \$2,500,000.....	2,500,000	7	Jan. & July.	Charleston.	1898	....	1st Mortgage.....	1,110,000	7	Jan. & July.	New York.	1881	...
Boston and Albany:							Chicago and Milwaukee, (45 m.)						
Sterling Loans.....	2,051,520	6*	April & Oct.	London.	'69-'71	...	1st Mortgage (C. and N. W.)...	397,000	7	May & Nov.	New York.	1874	90
Dollar Loan.....	798,000	6	"	Boston.	1875	....	Chicago and Northwestern:						
Boston, Clinton and Fitchburg:							Prof. sinking fund b'ds (193 m.)	1,249,500	7	Feb. & Aug.	New York.	1885	96
1st Mortgage.....	400,000	6	Jan. & July.	Boston.	1884	...	Funded Coupons.....	755,000	7	May & Nov.	"	1883	92
Boston, Concord and Montreal:							General 1st Mortgage.....	3,592,500	7	Feb. & Aug.	"	1886	94 1/2
1st Mort. (Conc. to War. 71 m.)	204,000	7	Feb. & Aug.	New York.	1865	94 1/2	1st Mortgage, Appleton Ext.....	184,000	7	"	"	1885	84
2d Mort. conv. (1st M. on 22 1/2 m.)	100,000	6	Jan. & July.	Boston.	1870	99 1/2	1st Mortgage, Green Bay Ext.....	300,000	7	"	"	1885	87 1/2
2d Mort. conv. (1st M. on 22 1/2 m.)	250,000	7	"	New York.	1870	...	Equipment Bonds.....	101,000	7	April & Oct.	"	1874	...
Sinking Fund Mortgage.....	496,000	6	"	Boston.	1889	89 1/2	Mississippi River Bridge Bonds	200,000	7	Jan. & July.	"	1884	...
Boston, Hartford and Erie:							Elgin and State L. purchase b'ds	138,000	6	"	"	1878	...
1st Mortgage (old).....	600,000	7	March & Sept.	Boston.	1884	53	Consolidated sinking fund bonds	2,077,000	7	F. M. A. & N.	"	1915	88
1st Mortgage (new) for \$20,000,000	20,000,000	7	Jan. & July.	"	1899	23	Equipment Bonds.....	825,000	10	May & Nov.	"	'68-'71	...
Boston and Lowell:							1st Mort. (Gal. & Chic. U. R. R.)	1,807,000	7	Feb. & Aug.	"	1882	96
Convertible bonds.....	101,000	6	Jan. & July.	Boston.	1873	...	2d Mort. (Gal. & Chic. U. R. R.)	955,000	7	May & Nov.	"	1875	95
Scrip certificates.....	366,000	3	April & Oct.	"	1873	96 1/2	1st Mortgage (Peninsula R.R.)	855,000	7	March & Sept.	"	1899	90
Wharf purchase bonds.....	200,000	6	"	"	1879	98	1st Mort. (Chi. & Mil. R. W. 85 m)	1,129,000	7	Jan. & July.	"	1898	...
Buffalo, Bradford and Pittsburg:							1st Mortgage (Beloit & Mad. R.)	354,000	7	"	"	1888	...
1st Mortgage.....	580,000	7	Jan. & July.	New York.	1886	....	Chicago, Rock Island and Pacific:						
Buffalo, Corry and Pittsburg:							1st Mortgage (C. & R. I. R.R.)	1,397,000	7	Jan. & July.	New York.	1870	...
1st Mortgage (B. C. & P. of Pa.)	100,000	7	Jan. & July.	Pittsburg.	18—	...	1st Mort. (C. R. I. and P. R. R.)	7,376,000	7	"	"	1896	97 1/2
1st Mort. (Buff. & O.C. Cross-cut)	600,000	7	"	New York.	18—	...	Chillicothe and Brunswick:						
Buffalo and Erie:							1st Mortgage.....	500,000	8	May & Nov.	New York.	1894	82 1/2
Co. bonds (Buff. and State Line)	400,000	7	June & Dec.	New York.	1870	86	Cincinnati, Dayton and Eastern:						
Co. bonds (Buff. and State Line)	100,000	7	May & Nov.	"	1873	...	1st Mortgage.....	465,000	7	Feb. & Aug.	New York.	1896	...
Co. bonds (Buff. and State Line)	200,000	7	Jan. & July.	"	1882	...	Cincinnati, Hamilton and Dayton:						
Co. bonds (Erie and Northeast).	300,000	7	March & Sept.	"	1886	...	2d Mortgage (1st Mort. paid)...	1,250,000	7	May & Nov.	New York.	1880	80
Buffalo, New York and Erie:							3d Mortgage.....	500,000	8	Jan. & July.	"	1885	...
1st Mortgage.....	2,000,000	7	June & Dec.	New York.	1877	88	New Mortgage.....	282,000	7	"	"	1877	...
2d Mortgage.....	380,000	7	May & Nov.	"	1872	83 1/2	Cincinnati and Indiana:						
Burlington, Cedar Rapids & Minn.:							1st Mortgage.....	2,500,000	7	June & Dec.	New York.	1892	73
1st Mortgage.....	600,000	8	Feb. & Aug.	New York.	1919	...	2d Mortgage.....	2,000,000	7	Jan. & July.	"	'77-'87	70
Burlington and Missouri River:							Cincinnati and Indianapolis June:						
Land Grant Mortgage.....	4,680,608	7	April & Oct.	New York.	1893	90	1st Mortgage.....	1,200,000	7	Jan. & July.	New York.	1888	...
1st Convertible bonds.....	600,000	7	Jan. & July.	"	1870	...	2d Mortgage.....	800,000	7	March & Sept.	"	1896	...
2d Convertible bonds.....	600,000	7	"	"	1875	...	1st Mortgage (Newcastle Br.)..	250,000	7	June & Dec.	"	1884	...
3d Convertible bonds.....	958,545	8	"	"	1894	102 1/2	Cincinnati and Martinsville:						
California Pacific:							1st Mort. (guar. by I. C. & Laf.)	400,000	7				

AMERICAN RAILROAD BOND LIST.

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Description of Bonds.	Amount.	Rate.	Interest Payable.		Due.	Price.	Description of Bonds.	Amount.	Rate.	Interest Payable.		Due.	Price.
			When.	Where.						When.	Where.		
Clev., Painesv. & Ash. (L. Shore):							Erie:						
1st Mortgage.....	\$500,000	7	Jan. & July.	New York.	1874	92½	1st Mortgage.....	\$3,000,000	7	May & Nov.	New York.	1897	100
2d Mortgage.....	1,000,000	7	" "	" "	1880	92½	2d Mortgage.....	4,000,000	7	March & Sept.	" "	1879	92½
3d Mortgage.....	1,000,000	7	April & Oct.	" "	1892	91½	3d Mortgage.....	6,000,000	7	" "	" "	1883	87
Cleveland & Toledo (Lake Shore):							4th Mortgage.....	4,441,000	7	April & Oct.	" "	1880	80½
1st Mort. (June R. R. 1st Div.)..	13,000	7	April & Oct.	New York.	1867	....	5th Mortgage.....	928,500	7	June & Dec.	" "	1888	80
1st Mort. (June R. R. 2d Div.)..	116,000	7	June & Dec.	" "	1882	....	Buffalo Branch Bonds.....	186,400	7	Jan. & July.	" "	1891	....
1st Mortgage S. F. (Clev. & Tol.)	2,015,000	7	Jan. & July.	" "	1885	100	Sterling Loan £800,000.....	4,544,444	6*	March & Sept.	London.	1875	....
2d Mortgage (Clev. & Tol.)....	1,000,000	7	April & Oct.	" "	1886	....	Erie and Pittsburg:						
Columbia and Augusta:							1st Mortgage.....	900,000	7	Jan. & July.	Philadelphia.	1882	....
1st Mortgage for \$1,000,000.....	410,000	7	Jan. & July.	New York.	1888	....	2d Mortgage.....	700,000	7	April & Oct.	" "	1875	....
Columbus, Chicago & Ind. Cent.:							New Mortgage.....	859,000	7	Jan. & July.	" "	1893	....
Consol. 1st Mortgage skg fund.....	15,000,000	7	April & Oct.	New York.	1908	81	Kvansville and Crawfordsville:						
Columbus and Indiana Central:							1st Mortgage of 1852.....	350,000	7	Jan. & July.	New York.	1869	....
2d Mortgage.....	821,000	7	May & Nov.	New York.	1886	59	1st Mortgage of 1854.....	740,000	7	May & Nov.	" "	1869	....
Income Bonds.....	1,243,000	7	" "	" "	1881	....	Rockville Extension 1st Mort.....	150,000	7	Feb. & Aug.	" "	1881	....
Columbus and Hooking Valley:							Fall River, Warren & Providence:						
1st Mortgage.....	262,500	7	Jan. & July.	New York.	1897	....	1st Mortgage.....	200,000	7	" "	Providence.	18—	....
Consol. 2d Mortgage skg fund.....	5,000,000	7	Feb. & Aug.	" "	1909	....	Flemington:						
Columbus and Xenia:							1st Mortgage guaranteed.....	100,000	6	" "	Princeton.	18—	....
1st Mortgage for \$500,000.....	248,000	7	March & Sept.	Columbus.	1890	....	Flint and Pere Marquette:						
Connecticut and Passumpsic Riv.:							1st Mortgage.....	1,520,500	7	" "	New York.	18—	....
1st Mortgage sinking fund.....	500,000	6	June & Dec.	Boston.	1876	94½	Galena & Chic. Union (C.N. & W.):						
Notes of '66 and '67, free.....	295,000	7	" "	" "	76-77	100	1st Mortgage.....	1,807,000	7	Feb. & Aug.	New York.	1882	99
Connecticut River:							2d Mortgage.....	1,985,000	7	May & Nov.	" "	1875	92
1st Mortgage.....	250,000	6	March & Sept.	Boston.	1878	93	Georgia:						
Connecting:							Bonds.....	592,000	7	J. & J.	Augusta.	70-75	....
1st Mortgage guaranteed.....	1,000,000	6	Jan. & July.	Philadelphia.	1896	83	Grand Rapids and Indiana:						
Cumberland and Pennsylvania:							1st Mortgage.....	167,000	7	Jan. & July.	New York.	1886	....
1st Mortgage for \$1,000,000.....	875,000	6	March & Sept.	New York.	1891	....	Grand River Valley:						
2d Mortgage sinking fund.....	799,000	6	May & Nov.	" "	1885	....	1st Mortgage, guaranteed.....	1,000,000	7	Jan. & July.	New York.	1886	....
Cumberland Valley:							Grand Trunk (Can.):						
1st Mortgage.....	161,000	8	April & Oct.	Philadelphia.	1904	....	1st Preference Bonds.....	12,573,661	5*	Jan. & July.	London.	18—	....
2d Mortgage.....	109,500	8	" "	" "	1904	....	2d Preference Bonds.....	7,356,996	5*	" "	" "	18—	....
Danbury and Norwalk:							3d Preference Stock.....	3,414,094	4*	" "	" "	18—	....
1st Mortgage.....	100,000	7	Jan. & July.	New York.	1880	....	4th Preference Stock.....	25,592,860	4*	" "	" "	18—	....
Danv., Urbann, Bloomg. & Pekin:							Equipment Bonds.....	2,433,333	6*	April & Oct.	" "	18—	....
1st Mortgage sinking fund.....	2,000,000	7	Jan. & July.	New York.	1908	....	Postal and Military bonds.....	6,840,000	var	Feb. & Aug.	" "	18—	....
Dayton and Michigan:							Great Western of Canada:						
1st Mortgage sinking fund.....	2,802,000	7	Jan. & July.	New York.	1881	....	Government Loan £573,688.....	2,782,387	6*	" "	Ottawa.	....	....
2d Mortgage.....	642,000	7	March & Sept.	" "	1884	....	Mortgage Bonds £615,200.....	2,983,720	6*	" "	London.	73-76	....
3d Mortgage.....	700,000	7	April & Oct.	" "	1888	....	Mortgage Bonds £547,000.....	2,652,950	5½*	" "	" "	77-78	....
Dayton and Union:							Stock Debentures £46,700.....	228,500	5*	" "	" "	irred.	....
1st Mortgage, registered.....	149,000	7	March & Sept.	New York.	1879	....	Great Western of Illinois:						
2d Mortgage.....	135,000	7	June & Dec.	" "	1879	....	1st Mortgage (W. Div.).....	1,000,000	10	April & Oct.	New York.	1868	105
Income Bonds.....	252,445	6	" "	" "	1879	....	1st Mortgage (E. Div.).....	45,000	7	Feb. & Aug.	" "	1888	....
Dayton and Western:							1st Mortgage (General).....	1,455,000	7	" "	" "	1888	89
1st Mortgage.....	275,000	7	March & Sept.	New York.	1882	....	2d Mortgage.....	2,500,000	7	May & Nov.	" "	1893	85½
2d Mortgage.....	463,000	6	Jan. & July.	" "	1905	....	Greenville and Columbia:						
Delaware:							1st Mortgage.....	1,000,000	7	Jan. & July.	New York.	1886	....
1st Mortgage.....	500,000	6	Jan. & July.	Philadelphia.	1875	....	Hannibal and St. Joseph:						
Guaranteed Bonds.....	100,000	6	" "	" "	1876	....	Land Mortgage.....	1,900,000	7	April & Oct.	New York.	1881	105½
State Loan.....	170,000	6	" "	" "	1875	....	Convertible bonds.....	800,000	7	Jan. & July.	" "	1883	....
Extension Mortgage.....	100,000	6	" "	" "	1880	....	Eight per cent. Loan.....	860,000	8	" "	" "	1874	106½
Delaware, Lackawann. & Western:							Ten per cent. Loan.....	1,000,000	10	" "	" "	1872	....
1st Mort. (L. & W.) for \$900,000.	564,000	7	Jan. & July.	New York.	1871	100	Ten per cent. Loan.....	500,000	10	" "	" "	1869	....
1st Mort. (East. Ext.) \$1,500,000.	1,111,000	7	April & Oct.	" "	1875	99½	1st Mort. (Quincy and Palmyra).	500,000	10	" "	" "	18—	....
2d Mort. (General) for \$2,600,000.	1,633,000	7	March & Sept.	" "	1881	94	1st Mort. (Kan. City & Cameron)	1,200,000	10	" "	" "	1891	108½
Des Moines Valley:							Harrisburg and Lancaster:						
1st Mortgage (on 154 miles).....	2,310,000	8	April & Oct.	New York.	1877	....	1st Mortgage, guaranteed.....	700,000	6	Jan. & July.	Philadelphia.	1883	95
Income Bonds.....	462,000	7	Jan. & July.	" "	1884	....	Hartford and New Haven:						
Detroit and Milwaukee:							1st Mortgage.....	927,000	6	Jan. & July.	New York.	1873	95
1st Mortgage, convertible.....	2,500,000	7	May & Nov.	New York.	1875	....	Hartford, Providence and Fishkill:						
2d Mortgage.....	1,000,000	8	" "	" "	1875	....	1st Mort. (R. Island 26.32 m.)...	481,000	7	Jan. & July.	Providence.	1876	....
1st Mortgage Funded Coupons.....	628,525	7	Jan. & July.	" "	1875	....	1st Mort. (Connecticut 96.04 m.)	1,574,500	7	" "	Hartford.	1876	....
2d Mortgage Funded Coupons.....	377,115	7	May & Nov.	" "	1875	....	Hempfield:						
Bonds of June 30, 1866, (cond.)	1,861,639	6	" "	" "	1886	....	1st Mortgage.....	500,000	6	Jan. & July.	Philadelphia.	1872	....
Detroit, Mon. & Tol. (M.S. & N.I.)							Housatonic:						
1st Mortgage.....	924,000	7	Feb. & Aug.	New York.	1876	92½	1st Mortgage.....	191,000	7	Jan. & July.	Bridgeport.	1877	....
Detroit and Pontiac (Det. & Mil.):							2d Mortgage.....	100,000	7	" "	" "	1885	....
1st Mortgage.....	100,000	7	Jan. & July.	New York.	1878	....	Houston and Texas Central:						
1st Mortgage.....	150,000	7	April & Oct.	" "	1878	....	1st Mortgage (L.G.) sinking fund	2,600,000	7*	Jan. & July.	New York.	1891	....
2d Mortgage.....	250,000	8	Feb. & Aug.	" "	1886	....	Hudson River:						
Dubuque and Sioux City:							1st Mortgage.....	1,936,000	7	Feb. & Aug.	New York.	1870	....
1st Mortgage (1st Division).....	300,000	7	Jan. & July.	New York.	1883	96	2d Mortgage, sinking fund.....	2,000,000	7	June & Dec.	" "	1885	104
1st Mortgage (construction).....	600,000	7	" "	" "	1894	....	3d Mortgage.....	183,000	7	May & Nov.	" "	1875	102
Sinking Fund (convertible).....	1,000,000	7	May & Nov.	" "	1888	....	Huntington and Broad Top Mt.:						
Dubuque Southwestern:							1st Mortgage.....	416,000	7	April & Oct.	Philadelphia.	1870	91
1st Mortgage, preferred.....	100,000	7	Jan. & July.	New York.	1895	....	2d Mortgage.....	367,500	7	Feb. & Aug.	" "	1875	....
2d Mortgage, ordinary.....	450,000	7	" "	" "	1895	....	Consol. Mortgage.....	887,045	7	April & Oct.	" "	1895	27½
East Brandywine & Waynesburg:							Illinois Central:						
1st Mortgage.....	140,000	7	Feb. & Aug.	Philadelphia.	1882	....	Construction.....	3,187,500	7	April & Oct.	New York.	1875	100½
East Pennsylvania:							Construction.....	332,000	6	" "	" "	1875	....
1st Mortgage, Sinking Fund.....	506,900	7	April & Oct.	Philadelphia.	1888	....	Redemption.....	2,500,500	6	" "	" "	1890	....
East Tennessee and Georgia:							Redemption, sterling.....	2,500,000	6*	" "	London.	1875	....
Tennessee Loan (old).....	1,037,000	6	Jan. & July.	New York.	1882	....	Illinois and Southern Iowa:						
Tennessee Loan (1866).....	430,277	6	" "	" "	1898	....	1st Mortgage.....	300,000	7	Feb. & Aug.	New York.	1882	....
Mortgage (old).....	640,000	6	" "	" "	1880	....	Indianapolis, Cin. and Lafayette:						
Mortgage (new).....	136,400	7	" "	" "	1880	....	1st Mortgage.....	2,500,000	7	Jan. & July.	New York.	1886	70
East Tennessee and Virginia:							1st Mortgage (Ind. and Cin.)...	500,000	7	April & Oct.	" "	1888	....
Tennessee Loan (old).....	1,599,000	6	Jan. & July.	New York.	1888	....	Indianapolis, Crawfordsv. & Danv.:						
Tennessee Loan (1866).....	600,000	6	" "	" "	1898	....	1st Mortgage.....	1,500,000	7	Jan. & July.	New York.	1888	....
Tennessee endorsed bonds.....	178,000	6	" "	" "	18—	....	1st Mortgage.....	612,000	7	May & Nov.	New York.	1881	....
Eastern:							Iowa River:						
State Loan (1st Lien).....	275,000	5	J. A. J. & O.	Boston.	68-72	....	1st Mortgage (Eldora R. R.)....	272,000	7	Jan. & July.	New York.	1888	....
2d Mortgage, (convert. sterling)...	420,000	5*	Jan. & July.	London.	1872	....	Jackson, Lansing and Saginaw:						
2d Mortgage, convertible.....	73,000	6	Feb. & Aug.	Boston.	1874	99	1st Mortgage.....	1,495,000	8	Jan. & July.	New York.	1884	95½
1st Mortgage (Exess Railroad)...	214,000	6	Jan. & July.	" "	1876	....	Jeffersonville (J. M. & L.):						
Bonds of 1868.....	500,000	6	March & Sept.	" "	1889	95	2d Mortgage.....	397,000	7	April & Oct.	New York.	1873	....
Edgelfield and Kentucky:							Jeffersonville, Madison & Indian:						
Tennessee Loan.....	870,000	6	Jan. & July.	New York.	18—	....	1st Mortgage.....	1,961,000	7	April & Oct.	New York.	1906	....
Elmira and Williamsport:							Joliet and Chicago:						
1st Mortgage.....	1,050,000	7	Jan. & July.	Philadelphia.	1880	92½	1st Mortgage, guaranteed, S. F..	500,000	8	Jan. & July.	New York.	1883	106
Income Bonds.....	570,000	5	April & Oct.	" "	1872	55½	Joliet and Northern Indiana:						
European and North American:							1st Mortgage, guaranteed.....	800,000	5	Jan. & July.	New York.	1874	....
1st Mortgage (Bangor to Winn.)...	1,000,000	6*	Jan. & July.	London.	1886	....						

AMERICAN RAILROAD BOND LIST.

An Asterisk (*) affixed to rate of interest signifies 'Payable in Coin.'

Description of Bonds.	Amount.	Rate.	Interest Payable.		Due.	Price.	Description of Bonds.	Amount.	Rate.	Interest Payable.		Due.	Price.
			When.	Where.						When.	Where.		
Junction, Philadelphia:							Mobile and Montgomery:						
1st Mortgage, guaranteed.....	800,000	6	April & Oct.	Philadelphia.	1896	89	1st Mortgage for \$2,500,000.....	\$.....	8*	May & Nov.	New York.	1900	95
Kentucky Central:							Mobile and Ohio:						
1st Mort. (Covington & Lexing.)	\$128,000	7	— & —	New York.	1873	....	1st Mortgage, Sterling.....	4,593,000	6*	May & Nov.	London.	1882	....
2d Mortgage (do.).....	794,000	7	— & —	"	1883	....	1st Mortgage, Sterling.....	4,593,000	8*	"	Mobile.	1882	77
3d Mortgage (do.).....	237,000	7	— & —	"	1885	....	Tennessee Loans.....	1,669,800	6	Jan. & July.	New York.	1891	....
Keokuk and St. Paul:							Income of '61, '62, '65 and '67...	388,900	8	May & Nov.	Mobile.	1867	....
1st Mortgage, sinking fund, conv.	400,000	8	May & Nov.	New York.	1879	99	Liquidation (10 year) bonds.....	556,421	8	"	New York.	1876	....
Knoxville and Charleston:							Interest bonds.....	697,900	8	"	Mobile.	1882	72
Tenn. State Loan.....	450,000	6	Jan. & July.	New York.	1898	....	Montgomery and Eufala:						
Knoxville and Kentucky:							1st Mortgage, endorsed by Ala.....	129,000	8	March & Sept.	New York.	1886	....
Tenn. State Loan (old).....	1,310,000	6	Jan. & July.	New York.	1890	....	Montgomery and West Point:						
Tenn. State Loan (new).....	800,000	6	"	"	1898	....	Income Bonds.....	100,000	8	Jan. & July.	New York.	1871	....
Lackawanna and Bloomsburg:							Income Bonds.....	308,900	8	"	"	1876	....
1st Mortgage.....	900,000	7	Jan. & July.	New York.	1875	....	Mortgage Bonds.....	719,500	8	"	"	1881	....
1st Mortgage (Extension).....	400,000	7	March & Sept.	Philadelphia.	1885	....	Morris and Essex:						
2d Mortgage.....	500,000	7	April & Oct.	"	1880	....	1st Mortgage, Sinking Fund.....	5,000,000	7	May & Nov.	New York.	1915	100
2d Mortgage (Extension).....	400,000	7	May & Nov.	"	1890	....	2d Mortgage.....	3,000,000	7	Feb. & Aug.	"	1891	96
Lake Erie and Louisville:							Nashville and Chattanooga:						
1st Mortgage for \$1,600,000.....	500,000	7	Jan. & July.	New York.	1893	....	1st Mortgage, endorsed by Tenn.....	1,569,000	6	Jan. & July.	New York.	1890	....
Lawrence:							Tenn. State Loan.....	150,000	6	"	"	1892	....
1st Mortgage.....	360,000	7	"	Pittsburg.	1886	....	Tenn. Coupons Funded.....	426,270	6	"	"	1892	....
Lehigh and Lackawanna:							Nashville and Decatur:						
1st Mortgage (tax free).....	200,000	7	Feb. & Aug.	Philadelphia.	1897	88	Tenn. State Loan.....	2,465,176	6	Jan. & July.	New York.	1900-92	....
Lehigh Valley:							Income Bonds (Tenn. and Ala.).....	205,000	10	April & Oct.	Nashville.	1870	....
1st Mort. (exchangeable for new)	1,262,000	6	May & Nov.	Philadelphia.	1873	100	2d Mortgage.....	500,000	6	"	New York.	1887	....
New Mortgage, free of taxes.....	1,917,000	6	June & Dec.	"	1898	98	Nashville and Northwestern:						
1st Mortgage (Hazleton).....	149,500	6	Jan. & July.	"	1878	96	Tenn. State Loan.....	2,672,000	6	Jan. & July.	New York.	1888-94	....
Little Miami:							2d Mortgage.....	792,050	6	"	"	1888-94	....
1st Mortgage.....	1,489,000	6	May & Nov.	New York.	1883	....	Naugatuck:						
Cincinnati Loan.....	100,000	6	"	Cincinnati.	1880	....	1st Mortgage, Convertible.....	166,000	7	Jan. & July.	Bridgeport.	1876	....
Little Rock and Fort Smith:							Newark and New York:						
1st Mortgage for \$3,500,000.....	.....	6*	.....	Boston	....	....	1st Mortgage.....	600,000	7	Jan. & July.	New York.	18—	....
Little Schuylkill:							Newburg & New York (Oct. 1, '68):						
1st Mortgage, sinking fund.....	807,500	7	April & Oct.	Philadelphia.	1877	100 1/2	1st Mortgage.....	250,000	7	Jan. & July.	New York.	18—	....
Long Island:							New Bedford and Taunton:						
1st Mortgage.....	500,000	6	Jan. & July.	New York.	1875	....	1st Mortgage.....	174,000	6	Jan. & July.	Boston.	1881	....
Hunter's Point Extension.....	175,000	7	Feb. & Aug.	"	1890	....	New Brunswick and Canada:						
Glen Cove Branch.....	150,000	6	May & Nov.	"	1893	....	1st Mortgage, Sterling \$220,000.....	1,100,000	6*	May & Nov.	London.	1867	....
Louisville, Cincin. and Lexington:							Newcastle and Beaver Valley:						
1st Mortgage for \$3,000,000.....	2,628,000	7	Jan. & July.	New York.	1897	....	1st Mortgage for \$150,000.....	125,000	7	May & Nov.	Philadelphia.	1882	....
Louisville and Frankfort:							2d Mortgage for \$100,000.....	29,500	7	March & Sept.	"	1877	....
1st Mortgage.....	88,000	6	Jan. & July.	New York.	1870-78	....	New Haven and Darby:						
Louisville Loan.....	100,000	6	"	"	1881	....	1st Mortgage.....	300,000	7	May & Nov.	New York.	1888	....
Louisville and Nashville:							New Haven and Northampton:						
1st Mortgage, Main Stem.....	1,424,000	7	Jan. & July.	New York.	1869-77	98	1st Mortgage.....	450,000	7	Jan. & July.	New Haven.	1869	....
1st Mortgage, Memphis Branch.....	267,000	7	May & Nov.	"	1870-76	96	1st Mort. (Hampa. & Hampd.)..	200,000	6	April & Oct.	"	1874	....
1st Mortgage, Bardstown Branch.....	27,500	7	Jan. & July.	"	1870	....	New Jersey:						
1st Mort. Lebanon Branch Ext.....	88,000	7	May & Nov.	"	1880-85	92	Company Bonds (var. issues)...	850,000	6	Feb. & Aug.	New York.	1875-87	93
Louisville Loan, Main Stem.....	849,000	6	April & Oct.	"	1886-87	....	New London Northern:						
Louisville Loan, Lebanon Br.....	225,000	6	May & Nov.	"	1886	....	1st Mortgage.....	60,000	7	Jun. & Dec.	New London.	1875	....
Louisville Loan, Leb. Br. Ext.....	333,000	6	April & Oct.	"	1893	....	1st Mortgage, Extension.....	370,000	7	March & Sept.	"	1885	....
Consolid. 1st mort. for \$8,000,000	2,000,000	7	"	"	1898	90	New Mortgage.....	230,000	7	April & Oct.	New York.	1888	....
Louisville, N. Albany & Chicago:							N. Orleans, Jackson & Gt. North..						
1st Mort. New Albany & Salem	2,235,000	6	— & —	New York.	1892	....	1st Mortgage for \$3,000,000.....	2,741,000	8	Jan. & July.	New York.	1886	....
Macon and Brunswick:							2d Mortgage for \$1,500,000.....	1,157,000	8	April & Oct.	"	1890	....
1st Mort. endorsed by Georgia..	140,000	7	Jan. & July.	New York.	1881	....	N. Orleans, Opelousas & Gt. Wtn:						
Mahanoy and Broad Mountain:							1st Mort. construction (80 m.) ..	1,842,000	8	April & Oct.	New York.	1889	....
1st Mortgage.....	250,000	6	Jan. & July.	Philadelphia.	1884	....	2d Mort. (F.) for \$1,000,000 (80m.)	.....	8	Jan. & July.	"	1887	....
Maine Central:							New York Central:						
\$1,100,000 Loan.....	1,095,600	6*	Feb. & Aug.	Boston.	1900-91	99	Premium, Sinking Fund Bonds.....	5,946,689	6	May & Nov.	New York.	1883	91
\$400,000 Loan.....	307,700	6	June & Dec.	"	1870-71	....	Funding, Sinking Fund Bonds..	1,514,000	7	Feb. & Aug.	"	1876	100
Bangor City Loan.....	621,000	6	April & Oct.	"	1874	....	Bonds for B. & N. Falls R.R. Co.	76,000	6	May & Nov.	"	1883	....
2d Mort. (Penob. & Ken. R. R.)	800,000	6	Feb. & Aug.	Bangor.	1870	....	Bonds for railroad stocks.....	592,000	6	"	"	1883	86
Marietta and Cincinnati:							Bonds for real estate.....	162,000	6	"	"	1883	87
1st Mortgage.....	2,454,342	7	Feb. & Aug.	Baltimore.	1891	91	Bonds and mortgages.....	58,215	7	various.	"	var.	....
1st Mortgage, Sterling.....	1,050,000	7*	"	London.	1891	....	Convertible bonds.....	210,000	7	Feb. & Aug.	"	1876	....
2d Mortgage.....	2,500,000	7	May & Nov.	Baltimore.	1896	75	Renewal bonds of 1868.....	2,900,000	6	June & Dec.	"	1887	91 1/2
Scioto and Hocking Valley.....	300,000	7	"	"	1896	....	New York and Flushing:						
Memphis and Charleston:							1st Mortgage.....	125,000	7	— & —	New York.	18—	....
Tenn. State Loan.....	1,817,937	6	Jan. & July.	New York.	1890	....	New York and Harlem:						
1st Mortgage, Convertible.....	1,293,000	7	May & Nov.	"	1880	....	1st Mortgage of 1853.....	3,000,000	7	May & Nov.	New York.	1873	102
2d Mortgage.....	1,000,000	7	Jan. & July.	"	1885	....	Consolidated mortgage of 1863..	1,797,000	7	Feb. & Aug.	"	1893	....
Memphis and Little Rock:							New York and New Haven:						
Tenn. State, endorsements.....	445,000	6	Jan. & July.	New York.	1890	....	1st Mortgage.....	1,059,500	6	April & Oct.	New York.	1875	97
Mortgage (road and land).....	1,300,000	8	May & Nov.	"	1890	....	New York, Providence & Boston:						
Ark. State Loan.....	900,000	7	Jan. & July.	"	1897	....	1st Mortgage.....	250,000	6	Feb. & Aug.	New York.	1875-78	96
Michigan Central:							Extension Bonds.....	250,000	6	May & Nov.	"	1883	....
1st Mortgage, sterling.....	467,489	6*	Jan. & July.	London.	1872	....	Norfolk and Petersburg:						
1st Mortgage, sterling, convertible	500,000	8*	March & Sept.	"	1869	....	1st Mortgage.....	110,500	7	Jan. & July.	New York.	1877	....
1st Mortgage, dollars, convertible	1,294,500	8	"	New York.	1869	....	1st Mortgage.....	303,000	8	"	"	1877	....
1st Mortgage, dollars, convertible	500,000	8	April & Oct.	"	1882	....	2d Mortgage for \$300,000.....	43,000	8	"	Norfolk.	1872	....
Consol. Sinking Fund Mortgage	4,207,000	8	"	"	1882	120	North Eastern:						
Michigan Southern & North. Ind.:							1st Mortgage.....	700,000	7	March & Sept.	Charleston.	1869	....
1st Mortgage, Sinking Fund.....	6,728,000	7	May & Nov.	New York.	1885	101 1/2	2d Mortgage for \$300,000.....	145,000	7	"	"	1868	....
2d Mortgage.....	2,693,000	7	"	"	1877	97	North Missouri:						
Detroit, Monroe & Toledo Mort.	924,000	7	Feb. & Aug.	"	1876	93	1st Mortgage of 1865.....	6,000,000	7	Jan. & July.	New York.	1895	86 1/2
Mifflin and Centre County:							2d Mortgage of 1868.....	4,000,000	7	April & Oct.	"	1888	....
1st Mortgage.....	172,500	6	April & Oct.	Philadelphia.	1885	North Pennsylvania:						
Milwaukee & Chicago, (40 miles):													

AMERICAN RAILROAD BOND LIST.

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Description of Bonds.	Amount.	Rate.	Interest Payable.		Due.	Price.	Description of Bonds.	Amount.	Rate.	Interest Payable.		Due.	Price.	
			When.	Where.						When.	Where.			
North Carolina:							Portland and Kennebec:							
Equipment Bonds of 1857.....	\$339,000	8	March & Sept.	Co.'s shops.	1867	....	1st Mortgage.....	\$230,000	6	April & Oct.	Boston.	1883	....
New Loan for \$800,000.....		8	"	"	1887	....	Consolidated Bonds.....	300,000	6	"	"	1895	....
Norwich and Worcester:							Pittsburg, Ft. Wayne & Chicago:							
1st Mort. (Mass. Loan) skg fund	400,000	6	Jan. & July.	Boston.	1877	....	1st Mortgage (Series A).....	875,000	7	Jan. & July.	New York.	1912	104
Construction bonds.....	124,500	7	"	"	1877	1st Mortgage (Series B).....	875,000	7	Feb. & Aug.	"	"	1912
Steamboat mortgage.....	45,000	7	Feb. & Aug.	"	1870	1st Mortgage (Series C).....	875,000	7	March & Sept.	"	"	1912
Ogdensburg and Lake Champlain:							1st Mortgage (Series D).....	875,000	7	April & Oct.	"	"	1912
1st Mort. conv. into pref. stock..	985,000	7	Jan. & July.	Boston.	1870	100	1st Mortgage (Series E).....	875,000	7	May & Nov.	"	"	1912
Equipment Bonds.....	300,000	8	"	"	'69-'78	102	1st Mortgage (Series F).....	875,000	7	June & Dec.	"	"	1912
Ohio and Mississippi:							2d Mortgage (Series G).....	860,000	7	Jan. & July.	"	"	1912	97
1st Mortgage, E. Div.....	2,050,000	7	Jan. & July.	New York.	1872	99 1/2	2d Mortgage (Series H).....	860,000	7	Feb. & Aug.	"	"	1912
1st Mortgage, W. Div.....	850,000	7	"	"	1872	2d Mortgage (Series I).....	860,000	7	March & Sept.	"	"	1912
2d Mortgage, W. Div.....	556,000	7	"	"	1874	2d Mortgage (Series K).....	860,000	7	April & Oct.	"	"	1912
Income, W. Div.....	221,500	7	April & Oct.	"	1882	2d Mortgage (Series L).....	860,000	7	May & Nov.	"	"	1912
Consolidated Mort. for \$6,000,000	1,652,000	7	Jan. & July.	"	1898	87 1/2	2d Mortgage (Series M).....	860,000	7	June & Dec.	"	"	1912
Consolidated Mort. sterling.....	83,420	"	London.	1898	3d Mortgage.....	2,000,000	7	April & Oct.	"	"	1912	95
Oil Creek and Allegheny River:							Bridge (O. & P. R. R.) bonds...	153,000	7	May & Nov.	"	"	1876
1st Mortgage.....	3,170,000	7	May & Nov.	Philadelphia.	1897	81	Platteville and Sacramento:							
Old Colony and Newport:							1st Mortgage.....	225,000	10	Jan. & July.	San Francisco	1894	....
Company Bonds.....	1,000,000	6	March & Sept.	Boston.	1876	96	1st Mortgage.....	525,000	10*	"	"	1894	....
Company Bonds.....	458,000	6	April & Oct.	"	1875	96	Providence, Warren and Bristol:							
Company Bonds.....	1,388,000	7	Feb. & Aug.	"	1877	103	1st Mortgage.....	100,000	8	March & Sept.	Providence.	1872	....
Orange, Alexandria & Manassas:							2d Mortgage.....	50,000	8	June & Dec.	"	1877	....
1st Mort. (Alex. to Gordonsville)	400,000	6	May & Nov.	New York.	1873	82	Quincy and Toledo:							
2d Mort. (Charlotte to Lynchb.)	1,130,500	6	Jan. & July.	"	1875	76 1/2	1st Mortgage.....	500,000	7	May & Nov.	New York.	1890	82 1/2	
3d Mort. " " "	573,500	8	May & Nov.	Richmond.	1873	82	Raritan and Delaware Bay:							
4th Mort. " " "	331,700	8	March & Sept.	Alexandria.	1880	73 1/2	1st Mortgage, S. F. (68 m.)....	1,000,000	7	March & Sept.	New York.	1888	....
5th Mort. (general).....	708,000	7	Jan. & July.	New York.	1882	75	2d Mortgage.....	250,000	7	"	"	1888	....
Va. State Loan.....	249,962	6	"	"	1887	....	Equipment Bonds, convertible..	296,000	7	"	"	1876	....
Oswego Valley:							Reading and Columbia:							
1st Mortgage 5-20 years.....	200,000	10	Jan. & July.	New York.	1888	....	1st Mortgage.....	650,000	7	March & Sept.	Philadelphia.	1882	....
Oswego and Rome.							2d Mortgage.....	350,000	7	June & Dec.	"	1884	....
1st Mort. guar. by R. W. & O....	350,000	7	May & Nov.	New York.	1916	....	Rensselaer and Saratoga:						
Income.....	200,000	6	Feb. & Aug.	"	1891	....	1st Mortgage (R. & S.).....	150,000	7	Jan. & July.	New York.	1873	....
Oswego and Syracuse:							1st Mortgage (Sar. & Whitehall)	400,000	7	March & Sept.	"	1886	....
1st Mortgage.....	498,500	6	May & Nov.	New York.	'70-'80	....	1st Mort. (Troy, Salem & Rutl.)	500,000	7	May & Nov.	"	1890	76 1/2
2d Mortgage.....	375,000	7	"	"	1885	....	2d Mortgage (R. & S.).....	450,000	7	Jan. & July.	"	'80-'87	....
Pacific of Mo.:							Richmond and Danville:							
Mortgage, construction.....	1,500,000	7	Jan. & July.	New York.	1880	96	Virginia State Loan.....	600,000	6	Jan. & July.	New York.	'87-'88	....
St. Louis Loan.....	700,000	6	"	"	'71-'73	97 1/2	Bonds guaranteed by Virginia..	161,600	6	"	"	'75-'76	....
1st (new) Mortgage.....	7,000,000	6*	Feb. & Aug.	New York.	1888	....	Consolidated, coupon.....	1,298,000	6	May & Nov.	"	'75-'90	....
Panama:							Consolidated, registered.....	408,500	6	"	Richmond.	'75-'90	77	
1st Mortgage, Sterling.....	93,847	7*	April & Oct.	London.	1875	....	Rich. Frederickburg & Potomac:						
2d Mortgage, Sterling.....	740,959	7*	Feb. & Aug.	"	1872	....	Company Bonds, sterling.....	67,778	6*	Jan. & July.	London.	1875	....
General Mortgage, Sterling.....	2,899,330	7*	April & Oct.	"	1897	....	Company Bonds, dollar.....	172,800	7	"	Richmond.	1875	....
Paterson and Newark:							Richmond and Petersburg:							
1st Mortgage guaranteed.....	500,000	7	Jan. & July.	New York.	1888	....	Company Bonds (coup. & reg.)..	130,500	7	June & Dec.	N. Y. & Rich.	1875	....
Pemberton and Hightstown:							Company Bonds (coupons).....	175,000	8	March & Sept.	Philadelphia.	1870	....
1st Mortgage endorsed.....	160,000	7	— & —	New York.	1877	....	Richmond and York River:						
Peninsular (Michigan):							1st Mortgage.....	600,000	8	— & —	New York.	18—	....
1st Mortgage for \$16,000 per m..	855,000	7*	May & Nov.	N. Y. & Lond.	1899	95	Roanoke Valley (R. & Dan.):							
Pennsylvania:							1st Mortgage.....	160,800	7	Feb. & Aug.	Richmond.	'69-'76	....
1st Mort.	4,972,000	6	Jan. & July.	Philadelphia.	1880	105	Rockford, R. Island & St. Louis:							
2d Mort. } Harriab. to Pittsb. }	2,283,840	6	April & Oct.	"	1875	101	1st Mortgage, convertible, S.F. free	9,000,000	7*	Feb. & Aug.	N. Y. & Lond.	1919	96	
2d M. stg.	1,645,000	6	J. A. J. & O.	Philadelphia.	1910	....	Rock Island and Peoria:						
General Mortgage.....	6,232,755	5	April & Oct.	Harrisburg.	1890	....	1st Mortgage.....	1,384,000	7	— & —	New York.	18—	....
State lien on whole property....	3,520,728	6	J. A. J. & O.	Philadelphia.	'69-'71	....	Rome, Watertown & Ogdensburg:						
Short Bonds and Debentures....	2,697,000	7	— & —	Philadelphia.	18—	91 1/2	Sinking Fund (Watert. & Rome)	571,000	7	June & Dec.	New York.	1891	100	
Pennsylvania and New York:							1st Mort. (Potsdam & Watert.)	757,500	7	March & Sept.	"	1880	....
1st Mortgage guaranteed.....	1,185,300	7	— & —	Philadelphia.	18—	....	1st Mort. (Potsdam & Watert.)	511,500	7	June & Dec.	"	'60-'74	....
Pennacola and Georgia:							Rutland and Burlington:							
1st Mortgage.....	1,185,300	7	Jan. & July.	New York.	18—	....	1st Mort. conv. into pref. stock..	1,800,000	7	Feb. & Aug.	Boston.	1863	200
1st Mortgage (Tallahassee R.R.)	206,000	7	"	"	18—	....	2d Mort. conv. into com. stock..	937,500	7	"	"	1863	55
2d Mortgage.....	255,000	8	"	"	18—	....	Sacramento Valley:						
Peoria and Bureau Valley:							1st Mortgage.....	400,000	10*	Jan. & July.	New York.	1875	....
1st Mortgage.....	600,000	8	Jan. & July.	New York.	18—	....	2d Mortgage.....	329,000	10*	Feb. & Aug.	Sacramento.	1881	....
Peoria, Pekin and Jacksonville:							St. Joseph and Council Bluffs:							
1st Mortgage.....	1,000,000	7	Jan. & July.	New York.	1887	....	1st Mortgage (in Missouri 80 m.)	1,400,000	10	March & Sept.	Boston.	1893	107 1/2
Perkiomen:							1st Mortgage (in Iowa 52 m.)...	150,000	10	"	"	1893	....
1st Mortgage.....	255,000	6	— & —	Philadelphia.	18—	80	2d Mortgage (" " ").....	500,000	7	— & —	"	1882	90 1/2	
Perth Amboy and Woodbridge:							St. Louis, Alton and Terre Haute:							
1st Mortgage, guaranteed.....	100,000	6	— & —	New York.	18—	....	1st Mortgage (Series A).....	1,100,000	7	Jan. & July.	New York.	1894	95
Philadelphia and Baltimore Cent:							1st Mortgage (Series B).....	1,100,000	7	April & Oct.	"	1894	....
1st Mortgage.....	575,000	7	Jan. & July.	Philadelphia.	1870	....	2d Mortgage preferred (Series C)	1,400,000	7	Feb. & Aug.	"	1894	83
Philadelphia and Erie:							2d Mortgage preferred (Series D)	1,400,000	7	May & Nov.	"	1894	....
1st Mortgage (Sunbury & Erie.)	1,000,000	7	April & Oct.	Philadelphia.	1877	101 1/2	2d Mortgage Income (Series E)	1,700,000	7	"	"	1894	77	
1st Mortgage (General).....	5,000,000	6	"	"	1881	92	St. Louis and Iron Mountain:							
2d Mortgage.....	4,000,000	6	"	"	1901	85 1/2	1st Mortgage for \$4,000,000....	3,000,000	7	Feb. & Aug.	New York.	1892	87	
3d Mortgage for \$3,000,000.....	600,000	7	Jan. & July.	"	1885	88 1/2	St. Louis, Jacksonville & Chicago:							
Philadelphia, Germant. & Norist:							1st Mortgage (\$15,000 per mile)..	2,365,000	7	April & Oct.	New York.	1884	92	
Convertible Loan.....	116,100	6	Jan. & July.	Philadelphia.	1882	....	2d Mortgage (\$5,000 per mile)...	360,000	7	Jan. & July.	"	1898	....
Philadelphia and Reading:							St. Louis and St. Joseph:							
Bonds of 1849.....	401,600	6	April & Oct.	Philadelphia.	1870	103	1st Mortgage.....	1,000,000	6*	May & Nov.	New York.	1893	....
Bonds of 1861.....	106,000	6	Jan. & July.	"	1871	97 1/2	St. Louis, Vandalia & T. Haute:							
Bonds of 1836-43-44-48 and 49..	2,497,800	6	"	"	1880	95	1st Mortgage, S. F., guaranteed..	1,900,000	7	Jan. & July.	New York.	1897	....
Bonds of 1857, convertible.....	171,500	6	"	"	1886									

AMERICAN RAILROAD BOND LIST.

An Asterisk (*) affixed to rate of interest signifies "Payable in Coin."

Description of Bonds.	Amount.	Rate.	Interest Payable.		Due.	Price.	Description of Bonds.	Amount.	Rate.	Interest Payable.		Due.	Price.
			When.	Where.						When.	Where.		
Seaboard and Roanoke:							Vicksburg and Meridian:						
1st Mortgage.....	\$210,000	7	— & —	New York.	1880	....	Consolidated Mort.—1st class ..	\$722,500	7	{ Apr.&Oct	Philadelphia.	1890	....
Seima and Meridian:							" " 2d class ..	850,000	7	or	"	1890	....
1st Mortgage.....	79,878	....	— & —	— & —	....	....	" " 3d class ..	154,000	7	{ Jan.&Jul.	"	1890	....
2d Mortgage.....	52,000	....	— & —	— & —	....	....	" " 4th class ..	1,263,000	7		"	1890	....
3d Mortgage.....	665,000	....	— & —	— & —	....	....	Virginia and Tennessee:						
4d Mortgage.....	665,000	....	— & —	— & —	....	....	1st Mortgage.....	494,000	6	June & Dec.	New York.	1872	83
Seima, Rome and Dalton:							2d Mortgage.....	23,500	6	" " "	"	1868	73
1st Mort. (Ala. and Tenn. River)	838,300	7	Jan. & July.	New York.	1872	....	3d Mortgage (Enlarged).....	990,000	6	" " "	"	1884	....
2d Mort. (Ala. and Tenn. River)	241,100	8	" " "	"	1864	....	Income Bonds.....	138,500	6	" " "	"	1865	....
Gen. Mort. (S.R. & D.) free of tax	5,000,000	7	April & Oct.	"	1887	....	Funding Bonds (\$1,000,000).....	730,000	8	" " "	"	1890	82
Shamokin Valley and Pottsville:							Warren:						
1st Mortgage.....	700,000	7	Feb. & Aug.	Philadelphia.	1872	....	1st Mortgage, guaranteed.....	511,400	7	Feb. & Aug.	New York.	1875	....
Shenoygan and Fond Lac:							Warwick Valley:						
1st Mortgage.....	264,000	7	Feb. & Aug.	New York.	1884	....	1st Mortgage.....	85,000	7	April & Oct.	New York.	1880	....
Sioux City and Pacific:							Western Alabama:						
1st Mortgage.....	1,828,320	7	April & Oct.	New York.	1898	....	1st Mortgage, guar.....	500,000	7	April & Oct.	New York.	1889	....
2d Mortgage (Gov. subsidy).....	1,828,320	6	Jan. & July.	"	1898	....	West Wisconsin:						
Somerset and Kennebec:							1st Mort. Land Grant, stg. conv	1,000,000	7	Jan. & July.	London.	1884	....
1st Mortgage.....	300,000	6	June & Dec.	Augusta.	1874	....	West Chester and Philadelphia:						
2d Mortgage.....	250,000	6	" " "	"	1876	....	1st Mortgage, convertible.....	400,000	7	Jan. & July.	Philadelphia.	1873	95
Shore Line (N. H. & N. L.):							2d Mortgage, registered.....	1,000,000	8	April & Oct.	"	1878	....
1st Mortgage, reconstruction ...	55,000	7	March & Sept.	New Haven.	1880	....	West Jersey:						
South Carolina:							Loan of 1883 for \$400,000.....	400,000	6	March & Sept.	Philadelphia.	1883	90
Sterling Bonds \$452,912 1/2.....	2,612,944	5*	Jan. & July.	London.	'71-'85	....	Loan of 1896 for \$1,000,000.....	983,500	6	Jan. & July.	"	1896	....
Sterling Bonds \$59,081 1/2.....	262,366	5*	" " "	Charleston.	'71-'85	....	Western (Boston and Albany):						
Domestic Bonds.....	418,016	6	" " "	"	'73-'76	....	Sterling Loans, \$899,900.....	2,051,520	5*	April & Oct.	London.	'90-'71	....
Domestic Bonds.....	563,500	7	April & Oct.	"	'68-'72	....	Dollar Bonds.....	792,000	6	" " "	Boston.	1875	101 1/2
Domestic Bonds.....	353,500	7	Jan. & July.	"	'88-'91	....	Western Maryland:						
South and North Alabama:							1st Mortgage, endorsed by Balt.	200,000	6	Jan. & July.	Baltimore.	1890	90
1st Mort. (\$16,000 p.m.) endorsed		8	— & —	New York.	1889	....	1st Mortgage unendorsed.....	400,000	6	" " "	"	1890	70
South Shore:							2d Mort. for \$300,000, end. by R.	300,000	6	" " "	"	1890	88
1st Mortgage.....	150,000	6	April & Oct.	Boston.	1880	90	2d M. for \$300,000, end. by W. Co.	300,000	6	" " "	"	1890	80
South Side, Va.:							Western Pennsylvania:						
2d Mort., guar. by Petersburg ..	300,000	6	Jan. & July.	Petersburg.	'70-'75	....	1st Mortgage, guaranteed.....	1,800,000	6	April & Oct.	Philadelphia.	1883	81 1/2
3d Mort. (for City Point R. R.).	175,000	6	" " "	"	'65-'68	....	Western Union:						
4th Mortgage.....	317,000	6	" " "	"	'70-'72	....	1st Mortgage for \$5,000,000	4,000,000	7	Feb. & Aug.	New York.	1896	....
Consol. Mortgage.....		8	" " "	New York.	'84-'90	....	Whitehall and Plattsburg:						
South Side, L. I.:							1st Mortgage.....	250,000	7	Jan. & July.	New York.	1873	....
1st Mortgage.....	750,000	7	March & Sept.	New York.	1887	89 1/2	Wicomico and Pocomoke:						
South Western:							1st Mortgage.....	150,000	6	Jan. & July.	Philadelphia.	1888	....
1st Mortgage.....	699,500	8	various.	Macon.	'75-'85	....	Wilmington and Weldon:						
South West Pacific:							1st Mortgage, guaranteed.....	2,320,000	6	Jan. & July.	New York.	'90-'92	....
1st Mort. guar. by Atl. & Pacific	2,000,000	6*	Jan. & July.	New York.	1871	....	1st Mortgage guar. by State.....		8	" " "	"	1897	64 1/2
Southern Minnesota:							Wilmington and Manchester:						
1st Mort. (10-20 yrs) \$20,000 p.m.		8	Jan. & July.	New York.	1888	....	1st Mortgage, 1st pref.....	725,000	7	June & Dec.	New York.	1886	....
Springfield and Columbus:							2d Mortgage, 2d pref.....	146,000	7	" " "	"	1886	....
1st Mortgage.....	150,000	7	Jan. & July.	New York.	1871	....	3d Mortgage, 3d pref.....	528,000	7	" " "	"	1886	....
Staten Island:							2d Mortgage.....	80,000	7	May & Nov.	"	1873	....
1st Mortgage.....	200,000	7	Jan. & July.	New York.	1886	....	Wilmington and Weldon:						
Sterling Mountain:							1st Mortgage, Sterling.....	576,888	6*	Jan. & July.	London.	1881	....
1st Mortgage.....	350,000	7	— & —	New York.	1874	....	2d Mortgage, Sterling.....	197,777	7*	May & Nov.	"	1886	....
Sullivan:							Sinking Fund Mortgage.....	508,000	7	Jan. & July.	New York.	1896	89 1/2
1st Mortgage.....	500,000	6	Jan. & July.	Boston.	1875	....	York and Cumberland (N. Cent.)						
2d Mortgage.....	250,000	6	Feb. & Aug.	"	1880	....	1st Mortgage.....	175,000	6	May & Nov.	Baltimore.	1870	88
Syracuse, Binghamton and N. Y.:							3d Mortgage.....	500,000	6	" " "	"	1877	....
1st Mortgage.....	1,720,000	7	April & Oct.	New York.	1876	....	CANAL BONDS.						
Summit Branch:							Chesapeake and Delaware:						
1st Mortgage.....	528,000	6	— & —	Philadelphia.	1876	86 1/2	1st Mortgage.....	2,254,000	7	Jan. & July.	Philadelphia.	1882	92
Sussex:							Chesapeake and Ohio:						
1st Mortgage.....	200,000	6	— & —	New York.	18—	....	State (Md.) Loan	2,000,000	6	J. A. J. & O.	Baltimore.	1870	91
Tioga:							Sterling, guaranteed	4,375,000	6*	Jan. & July.	London.	1890	....
1st Mortgage.....	250,500	7	May & Nov.	Philadelphia.	1872	91	Preferred Bonds.....	1,099,500	6	Jan. & July.	Baltimore.	1885	....
Toledo, Peoria and Warsaw:							Delaware Division:						
1st Mortgage (E. Div.).....	1,600,000	7	June & Dec.	New York.	1894	85	1st Mortgage.....	800,000	6	Jan. & July.	Philadelphia.	1878	82
1st Mortgage (W. Div.).....	1,800,000	7	Feb. & Aug.	"	1896	80	Delaware and Hudson:						
2d Mortgage (W. Div.).....	1,300,000	7	April & Oct.	"	1886	66 1/2	1st Mortgage.....	531,000	7	March & Sept.	New York.	1870	....
Toledo, Wabash and Western:							1st Mortgage (new).....	1,500,000	7	May & Nov.	"	1877	....
1st Mort. (Tol. & Ill. 75 m.).....	900,000	7	Feb. & Aug.	New York.	1890	91	Delaware and Raritan (See Cam						
1st M.L.Erie, W. & St. L. 167 m.)	2,500,000	7	" " "	"	1890	....	den and						
2d Mort. (Tol. & Wabash 75 m.)	1,000,000	7	May & Nov.	"	1878	84	Erne of Pennsylvania:						
2d Mort. (Wab. & West 167 m.)	1,000,000	7	" " "	"	1871	....	1st Mortgage.....	673,798	7	Jan. & July.	Philadelphia.	1866	....
Equipm't Bonds (T. & W. 75m.)	600,000	7	" " "	"	1883	80	Interest Bonds.....	161,960	7	" " "	"	18—	....
Consol. M. (T. W. & W. 499 m.)	2,232,000	7	F. M. A. & N.	"	1907	81 1/2	Illinois and Michigan:						
Troy and Boston:							Ill. State bonds, sterling, coupon	767,222	6*	April & Oct.	London.	1870	....
1st Mortgage.....	800,000	7	Jan. & July.	New York.	1887	....	Ill. State bonds, sterling, reg.....	500,967	6*	" " "	"	1870	....
2d Mortgage.....	300,000	7	April & Oct.	"	1885	....	Ill. State bonds, stg. coup. & reg.	32,700	6*	Jan. & July.	New York.	1870	....
3d Mortgage.....	650,000	7	May & Nov.	"	1875	....	Ill. State b'ds, cur. coup. & reg.	35,400	6	" " "	"	1870	....
Convertible Bonds.....	325,000	7	March & Sept.	"	1882	....	Lehigh Coal and Navigation:						
Troy Union:							1st Loan.....	384,162	6	J. A. J. & O.	Philadelphia.	1870	....
1st Mortgage, guaranteed.....	500,000	6	Jan. & July.	New York.	1873	....	2d Loan.....	5,006,122	6	" " "	"	1884	82 1/2
2d Mortgage, guaranteed.....	360,000	6	" " "	"	1878	....	3d Loan.....	2,000,000	6	" " "	"	1897	....
Union Pacific:							Gold Loan.....	5,000,000	6*	June & Dec.	"	1877	89
1st Mortgage, free.....	27,237,000	6*	Jan. & July.	N.Y. & Boston	'95-'99	82 1/2	Convertible Loan.....	1,201,850	6	" " "	"	1877	78 1/2
2d Mortgage (Gov. subsidy).....	27,236,512	6	" " "	"	'95-'99	....	Monongahela Navigation:						
Land Grant bonds for 10,000,000	9,856,000	7	April & Oct.	N.Y. & Boston	'87-'89	75 1/2	1st Mortgage.....	125,000	6	Jan. & July.	Pittsburg.	1887	....
Income bonds.....	10,000,000	10	Mar. & Sept.	Boston.	'72-'74	72 1/2	2d Mortgage.....	57,000	6	" " "	"	18—	....
Union Pacific—Central Branch:							Morris (and Banking):						
1st Mortgage.....	1,600,000	6*	May & Nov.	New York.	1895	....	1st Mortgage.....	465,500	6	April & Oct.	Jersey City.	1876	83 1/2
2d Mortgage (Gov. subsidy).....	1,600,000	6	Jan. & July.	"	1895	....	2d Mortgage.....	302,750	6	" " "	"	1876	76
Union Pacific—Eastern Division:							Boat Loan.....	232,087	6	" " "	"	1886	77
1st Mortgage on 140 miles.....	2,240,000	6*	Feb. & Aug.	New York.	1895	....	North Branch:						
1st Mortgage on 254 miles.....	4,063,000	6*	June & Dec.	"	1896	....	1st Mortgage.....	590,000	6	May & Nov.	Philadelphia.	1876	....
2d Mortgage (Gov. subsidy).....	6,303,000	6	Jan. & June.	"	'95-'97	....	Schuylkill Navigation:						
1st Mort. (Leavenworth Gr.).....	800,000	7	May & Nov.	"	1896	....	1st Mortgage.....	1,764,550	6*	March & Sept.	Philadelphia.	1872	85
Land Grant Mort. for \$500,000 ..	361,000	7	March & Sept.	"	'71-'76	....	2d Mortgage.....	3,980,870	6	Jan. & July.	"	1882	87 1/2
Income bonds \$10,000 p. m.....	4,275,350	7	June 1, '71.	"	1916	....	Improvement Loan.....	1,001,070	6	May & Nov.	"	1876	70
Vermont Central:							Susquehanna and Tide Water:						
1st Mortgage.....	3,000,000	7	June & Dec.	Boston.	1886	85	Md. State Loan, sterling.....	1,000,000	6	Jan. & July.	London.	1886	....
2d Mortgage.....	1,500,000	7	" " "	Philadelphia.	1891	36	Coupon Bonds.....	1,250,000	6	" " "	Baltimore.	1878	48
Equip. Loan (Vt.C. & Vt. & Ca.)	1,000,000	8	May & Nov.	Boston.	'77-'80	103	Preferred Interest Bonds.....	325,000	6	" " "	"	1894	....
Vermont and Massachusetts:							Union (Pa.):						
1st Mortgage.....	550,000	6	Jan. & July.	Boston.	1883	92 1/2	1st Mortgage.....	3,000,000	6	May & Nov.	Philadelphia.	1883	9
Vermont Valley:							West Branch and Susquehanna:						
1st Mortgage.....	384,000	7	April & Oct.	New York.	1860	....	1st Mortgage, sinking fund.....	750,000	6	Jan. & July.	Philadelphia.	1878	....
2d Mortgage.....	114,000	6	" " "	Boston.	1860	....	Wyoming Valley:						
3d Mortgage.....	293,200	7	" " "	New York.	1859	....	1st Mortgage.....	800,000	6	Jan. & July.	Philadelphia.	1878	78

Dec. 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Cleveland, Col. Cin. & Ind.	Ohio & Ind.	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Jan. 30, 1899	340.5	49.9	61.7	83	47	22	1,435	Cleveland and Mahoning	Ohio	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Feb. 28, 1899	340.5	49.9	61.7	83	47	22	1,435	Cleveland and Painesville	Ohio & Penn.	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Mar. 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Columbus and Xenia	Ohio, Ind. & Ill.	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Apr. 30, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord	New Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
May 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Claremont	New Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Jun. 30, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Jul. 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Aug. 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Sep. 30, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Oct. 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Nov. 30, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Dec. 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Jan. 30, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Feb. 28, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Mar. 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Apr. 30, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
May 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Jun. 30, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Jul. 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Aug. 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Sep. 30, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Oct. 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Nov. 30, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Dec. 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Jan. 30, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Feb. 28, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Mar. 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Apr. 30, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
May 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Jun. 30, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Jul. 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Aug. 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Sep. 30, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Oct. 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Nov. 30, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Dec. 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Jan. 30, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Feb. 28, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Mar. 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Apr. 30, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
May 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Jun. 30, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Jul. 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Aug. 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Sep. 30, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Oct. 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Nov. 30, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Dec. 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Jan. 30, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Feb. 28, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Mar. 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Apr. 30, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
May 31, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Jun. 30, 1899	340.5	49.9	61.7	83	47	22	1,435	Concord and Portsmouth	N. Hampshire	11,620,600	1,907,000	610,497	390.4	2,165,245	20,770,918	96,130,680	2,602,614	929,384	100
Jul. 31, 1899	340.5	49.9	61.7	83</															

Dec. 31, 1869	72.0	3.0	112.0	North Louisiana and Texas	20,000.00	991,004	415,407	7,000,000	13,000,000	381.0	2,054,486	432,124	100
Feb. 28, 1870	233.3	14.1	21.5	North Missouri	6,000.00	965,987	20,000.00	3,100,000	3,684,439	67.7	1,132,731	403,114	60
Oct. 31, 1869	66.0	22.3	25.0	North Pennsylvania	5,000.00	80,788	415,407	5,000,000	6,075,377	96.6	671,076	168,918	60
Dec. 31, 1869	18.0	2.6	123.0	North Northern Central	1,000.00	2,080,134	208,707	5,000,000	7,000,000	3,218	2,928,463	978,748	60
Mar. 31, 1869	61.3	18.4	4.5	North New Hampshire	1,000.00	208,707	208,707	3,000,000	3,000,000	82.5	869,026	256,271	8
Sept. 30, 1869	61.3	18.4	4.5	North New Jersey	1,000.00	208,707	208,707	3,000,000	3,000,000	35.3	325,389	65,764	8
Nov. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	66.4	741,967	171,967	8
Jan. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Mar. 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
May 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Jul. 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Sept. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Nov. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Jan. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Mar. 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
May 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Jul. 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Sept. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Nov. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Jan. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Mar. 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
May 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Jul. 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Sept. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Nov. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Jan. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Mar. 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
May 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Jul. 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Sept. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Nov. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Jan. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Mar. 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
May 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Jul. 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Sept. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Nov. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Jan. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Mar. 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
May 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Jul. 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Sept. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Nov. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Jan. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Mar. 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
May 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Jul. 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Sept. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Nov. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Jan. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Mar. 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
May 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Jul. 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Sept. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Nov. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Jan. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Mar. 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
May 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Jul. 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Sept. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Nov. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Jan. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Mar. 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
May 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Jul. 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Sept. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Nov. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Jan. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Mar. 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
May 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Jul. 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Sept. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Nov. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Jan. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Mar. 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
May 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Jul. 31, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Sept. 30, 1869	61.3	18.4	4.5	North New York	1,000.00	208,707	208,707	3,000,000	3,000,000	145.0	311,938	66,839	6
Nov. 30, 1869	61.3	18.4	4.5	North New York									

RAILROAD SHARE LIST, including Mileage, Rolling Stock, Debts, Income, Dividends, &c., &c.

An asterisk (*) occurring in the column headed "Rolling Stock" signifies that the cost thereof is included, in that headed "Railroad." A dash (—) across the column signifies "nil," and running dots (....) signify, "not ascertained." An asterisk (*) occurring in the column headed "Land Grant Railroads" signifies that the cost thereof is included, in that headed "Railroad." A dash (—) across the column signifies "nil," and running dots (....) signify, "not ascertained."

Abstract of General Balance Sheet.										Value of Shares.	
										Par.	P. & S.
										Dividends.	Net.
										Gross.	Freight.
										Passenger.	Trains Moved.
										Railroad Operated.	Surplus Income.
										Accounts.	Bonds.
										Stocks.	Accounts and Cash.
										Assets.	Rolling Stock.
										Railroad.	Freight.
										Car.	B. M. E.
										Engine.	Railroad in progress.
										2d Track and Sidings.	Main Line.
										Branch Line.	Years ending.
										Car.	Engine.
										Freight.	Freight.
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CITY PASSENGER RAILROAD SHARE AND BOND LISTS.

HORSE PASSENGER RAILROAD SHARE LIST

Years Ending.	Length equi, single track	Horses a Dummies.	Cars.	COMPANIES.	Cost of Road and Equipment.	Share Capital.	Indebtedness.		Earnings.		Dividends on paid Capital.	Value of Shares.		
							Bonded Debt.	Floating Debt.	Gross.	Net.		Par.	Paid.	Market.
m.	No.	No.			\$	\$	\$	\$			p. c.	\$	\$	\$
Sept. 30, '99	7.25	94	14	Albany (N.Y.)	150,309	99,800	40,000	5,000	78,817	21,467		100	100	
Nov. 30, '99	1.05			Albany st. Freight (B'ton) Mass.	49,749	150,000		4,377	3,404	Loss.	100	100		
Oct. 31, '98	3.41	11	4	Allentown (Pa.)	27,739	30,314		11,900	9,089	2,372	100	100		
Dec. 31, '98	31.00	479	73	Baltimore City (Md.)	1,762,725	900,000	694,000	23,300	480,046		6	100	100	20
Sept. 30, '99	2.66	400	50	Bleeker st. & F.F. (N.Y.C.) N.Y.	110,000	110,000			334,039	83,267		100	100	38
Nov. 30, '99	3.06			Boston and Chelsea (Mass.)	41,000	41,000				8,800	6 1/2	100	100	
Nov. 30, '99	10.76	185	46	Boston & West Roxbury Mass.	302,050	200,000	100,000	11,206	126,662	29,881	8.0	100	100	
Sept. 30, '99	16.00	775	103	Broadway (Brooklyn) N.Y.	522,895	2,100,000	1,500,000	100,000	713,423	232,733	4.0	100	100	
Sept. 30, '99	7.00	28	28	Brooklyn Bath & Coney I. N.Y.	179,730	100,000	80,000		30,153	Loss.	100	100		
Sept. 30, '99	72.00	1321	271	Brooklyn City (N.Y.)	1,957,420	1,500,000	300,000	85,000	1,282,132	327,466	12.0	100	100	
Sept. 30, '99	11.00	178	37	Brooklyn City & Newtown N.Y.	600,000	596,000	4,000	34,438	134,615	21,999		100	100	
Sept. 30, '99	19.25	22	8	B'klyn. Prosp. P. & Flatb. N.Y.	537,944	261,400	278,000		72,730	5,718		100	100	
Sept. 30, '99	4.50			B'klyn. Flatb. & Coney Isl. N.Y.		10,000	100,000	(Not in operation.)				100	100	
Sept. 30, '99	16.21	180	51	Buffalo street (Mass.)	327,662	56,300	316,500	6,457	160,428	18,957		100	100	
Sept. 30, '99	11.50	87	13	Bushwick (Brooklyn) N.Y.	307,348	262,200	2,000	20,056	76,650	Loss.		100	100	
Nov. 30, '99	28.52			Cambridge (Boston) Mass.	734,670	727,800	150,000	94	77,500	9.0		100	100	98 1/2
Sept. 30, '99	1.76	20	4	Central City (Syracuse) N.Y.	29,714	21,130	6,000		18,254	3,229	7.0	100	100	
Sept. 30, '99	36.00	731	125	Cen. P. & N.E.R. (N.Y.C.) N.Y.	1,627,021	1,068,400	626,000	76,052	588,724	13,997		100	100	
Oct. 31, '99	8.43	200	32	Citizens' (10th & 11th sts.) (Ph.) Pa.	179,635	192,750			240,293	81,318	36 1/2	50	19 1/2	
Oct. 31, '99	9.06	139	26	Citizens' (Pittsburg) Pa.	139,427	184,000	50,000	7,700	145,568	38,078	19 1/2	50	44	
Sept. 30, '99	14.83	212	16	Coney Island (Brooklyn) N.Y.	647,364	500,000	214,000	29,131	144,047	13,067		100	100	
Sept. 30, '99	22.79	808	107	Dry Dock, E.B. & B. (N.Y.C.) N.Y.	850,180	1,200,000	700,000		738,600	180,104		100	100	
Sept. 30, '99	3.50			Dunkirk and Fredonia N.Y.	42,643	34,825		1,337	8,480	4,162	3	100	100	
Oct. 31, '99	1.64	12	3	Easton and S. Easton N.Y.	25,230	29,562			8,565	1,237	2 1/2	25	20	
Sept. 30, '99	19.00	851	157	Eighth Avenue (N.Y. City) N.Y.	1,527,023	1,000,000	203,000		835,447	200,354	12.0	100	100	
Oct. 31, '99	2.26	18	4	Erle City (Conn.)	32,915	18,550	17,272		12,444	2,749	50	9		
Sept. 30, '99	2.70	10	4	Fifth Ward (Syracuse) N.Y.	43,301	29,285	10,000		10,403	456		100	100	
Sept. 30, '99	9.63	50	42	42d st. & Gr'd st. F. (N.Y.C.) N.Y.	1,052,479	748,000	260,000		376,903	112,240	10.0	100	100	
Oct. 31, '99	16.36	273	45	Frankford & Southwark (Ph.) Pa.	762,441	491,750	198,000		308,138	61,719	6 1/2	50	49 1/2	38 1/2
Sept. 30, '99	3.25	22	5	Genesee & Water st. (Syr.) N.Y.	59,053	42,500	12,700	2,000	12,598	545		100	100	
Oct. 31, '99	34.25	369	59	Germantown (Phila.) N.Y.	562,270	307,545	350,000		348,021	123,493	19 1/2	50	15	20 1/2
Oct. 31, '99	5.40	135	23	Girard College (Phila.) N.Y.	173,657	170,000			136,885	35,507	10	50	17	8 1/2
Sept. 30, '99	8.0	90	15	Grand st. & Middle Wil. N.Y.	75,000	125,000	190,000		37,890	10,205		100	100	
Sept. 30, '99	5.50	198	39	Gr'd st. & Newtown (B'k'n) N.Y.	200,000	170,000	30,000		82,066	7,093		100	100	
Oct. 31, '99	5.09	107	22	Green and Coates st. (Phila.) Pa.	239,746	150,000	100,000		176,078	39,959	7.0	50	15	33 1/2
Sept. 30, '99	10.00	11	5	Harlem Br. Morr. & F'dham. N.Y.	255,225	114,010	130,000	3,000	72,802	4,770		100	100	
Oct. 31, '99	2.14	19	6	Harrisburg City (Pa.)	60,111	41,995	9,950	1,955	7,280	222	25	24		
Dec. 31, '98	9.00	19	6	Hartford & Wethersfield Conn.	180,000	180,000						100	100	
Oct. 31, '99	14.10	339	56	Hest. Mant. & F'mount (Ph.) Pa.	470,619	306,390	164,400	1,500	283,927	63,060	2 1/2	50	7	1 1/2
Dec. 31, '98				Hoboken and Weehawken N.J.										
Sept. 30, '99	2.50			Hudson Av. (Brooklyn) N.Y.	161,555	106,700	74,000	9,272				100	100	
Dec. 31, '98	10.47			Jersey City & Bergen Point N.Y.										
Sept. 30, '99	3.56	27	9	Kingston and Rondout N.Y.	77,494	75,000			22,390	2,405		100	100	
Oct. 31, '99	5.20	113	17	Lombard and South st. (Ph.) Pa.	118,592	90,000	62,500	11,462	73,378	6,258	25	9		
Nov. 30, '99	4.04	49	9	Lowell Horse (Mass.)	70,000	55,830			31,469	6,385	2.0	100	100	
Nov. 30, '99	12.61	225	33	Lynn and Boston (Mass.)	274,331	200,000	50,000	41,952	166,752	14,010		100	100	20
Nov. 30, '99	3.75			Malden and Melrose (B'tn) Mass.	80,264	49,224			oper. M' dlesex.			100	100	
Nov. 30, '99	1.00			Marginal Freight (Boston) Mass.	190,646	119,000		33,636	13,679			100	100	30 1/2
Nov. 30, '99	3.34			Medford & Charlestown (B'tn) Mass.	36,600	21,000	4,500		oper. M' dlesex.			100	100	
Nov. 30, '99	5.11	58	6	Merrimack Valley (Mass.)	42,468	50,000		6,201	23,732	6,299		100	100	30 1/2
Sept. 30, '99	6.00	13	13	Metropolitan (Brooklyn) N.Y.	361,500	194,000	191,900	7,000	34,108	6,299		100	100	
Nov. 30, '99	44.18	914	170	Metropolitan (Boston) Mass.	1,594,499	1,250,000		238,457	821,332	134,567	10.0	100	100	69 1/2
Nov. 30, '99	7.12	244	49	Middlesex (Boston) Mass.	528,202	400,000	90,038	43,331	229,096	28,123	3.0	100	100	71 1/2
Sept. 30, '99	12.20	172	53	Ninth Avenue (N.Y. City) N.Y.	474,198	797,320	167,000		110,179	3,350		100	100	
Nov. 30, '99	3.31	16	6	Northampton & Wmberg Mass.	300,000	300,000		2,608	9,757	1,305		100	100	
Nov. 30, '99	2.11	7	2	North Woburn (Boston) Mass.	27,862	20,000	8,000	4,090	6,772	1,312		100	100	
Oct. 31, '99	7.25	81	14	Oakland & E. Liberty (Ph.) Pa.	118,592	59,500	17,000	50,163	47,781	8,462	50	50		
Dec. 31, '99	17.29	107	28	Orange and Newark N.J.	500,000	300,000	500,000		169,088	29,747		100	100	
Dec. 31, '98	3.61	32	9	Passenger (Cin.) O.	100,000	100,000						100	100	
Oct. 31, '99	9.64	224	46	Peoples' street (Scranton) Pa.	126,001	125,230			27,721	8,213	5	100	100	
Oct. 31, '99	7.07	124	23	Philadelphia City (C. & W.) Pa.	446,265	225,000	200,000	21,265	255,515	90,754	20	50	15	4
Oct. 31, '99	5.05	47	13	Philadelphia and Darby Pa.	258,419	200,000	57,000		40,434	13,645	20	20		
Oct. 31, '99	12.88	153	28	Philadelphia & Gray's Ferry Pa.	295,001	285,307	5,500		86,642	26,385	8	50	25	
Oct. 31, '99	8.25	80	16	P'g. Allegheny & Manchester Pa.	144,119	140,000	23,000	2,433	134,686	40,053	6 1/2	50	35	
Oct. 31, '99	5.20	92	16	Pittsburg and Birmingham Pa.	114,681	88,000	10,000	44,931	81,702	9,069	6 1/2	50	44	
Dec. 31, '98	6.88	92	16	Portland (Maine) Me.	160,300	160,300		600	45,007	12,809	7	100	100	
Oct. 31, '99	8.00	51	12	Ridge Av. & Manayunk (Ph.) Pa.	179,635	120,500	63,300		41,495	9,677	50	25		
Sept. 30, '99	10.00	72	20	Rochester and Brighton N.Y.	84,554	60,000	15,000	7,208	34,015	Loss.		100	100	
Sept. 30, '99	3.00	59	13	Sackett, Hoyt & Bergen st. N.Y.	361,500	194,000	191,900	7,000	15,856	Loss.		100	100	
Nov. 30, '99	9.58	50	11	Salem and Danvers Mass.	192,000	150,000	35,000	15,354	41,144	3,997		100	100	
Oct. 31, '99	3.48			Schuylkill River (Phila.) Pa.	47,468	50,000					50	5		
Sept. 30, '99	16.00	634	96	Second Avenue (N.Y. City) N.Y.	1,914,447	881,700	1,015,000		627,472	108,854		100	100	
Oct. 31, '99	34.00	500	72	2d and 3d street (Phila.) Pa.	640,529	73,387	109,300	10,000	401,156	69,532	10	50	30	
Oct. 31, '99	5.62	127	19	17th and 19th street (Phila.) Pa.	119,668	180,000		7,408	105,467	29,407	50			

PREFERRED & GUARANTEED STOCKS

(Marked with an asterisk (*) are guaranteed by lessees and thus (*) have equal dividends with lessees' stock.)

COMPANIES.	Amount outstanding.	Rate.	Div'ds Paid.	Market Price.
RAILROAD STOCKS:				
Atlantic & Gt. West'n (O. D.) pref.	\$1,919,000	7	7	116
Atlantic & St. Lawrence* guar.	2,494,000	4	4	116
Baltimore and Ohio, pref.	3,000,000	6	6	116
Berkshire* guar.	600,000	7	7	116
Blossburg and Corning* guar.	250,000	5	5	116
Boston, Concord and Montreal, pref.	1,340,000	6	6	116
Buffalo, N. York and Erie* guar.	950,000	7	7	116
Camden and Atlantic, pref.	600,000	7	7	116
Calumet* pref. and guar.	2,200,000	7	7	116
Cayuga and Susquehanna* guar.	589,110	9	9	116
Oedar Rapids & Missouri* preferred and guaranteed.	755,000	7	7	116
Central Ohio, preferred.	400,000	7	7	116
Chomung* guar.	380,000	8	8	116
Cheshire, preferred.	2,017,815	7	7	116
Chicago and Alton, pref.	2,425,400	7	7	116
Chicago, Iowa and Nebraska* guar.	2,600,000	10	10	116
Chicago and Northwestern, pref.	20,370,293	7	7	116
Cleveland and Mahoning* guar.	2,056,000	7	7	116
Cleveland and Toledo* guar.	6,250,000	3	3	116
Jochecho, preferred.	177,750	8	8	116
Connecticut and Passumpsic Rivers, preferred.	1,822,100	6	6	116
Cumberland Valley, 1st pref.	241,900	8	8	116
" 2d pref.	242,000	8	8	116
Delaware* guaranteed.	594,261	6	6	116
Detroit & Milwaukee* preferred and guaranteed.	1,500,000	6	6	116
Dubuque and Sioux City* preferred and guaranteed.	1,988,170	7	7	116
Dubuque Southwestern, pref.	330,308	7	7	116
Eastern (N. H.)* guaranteed.	492,500	8	8	116
Elmira, Jefferson and Canandaigua* guar.	500,000	5	5	116
Elmira and Williamsport* guar.	500,000	6	6	116
Elmira and Williamsport* preferred and guaranteed.	500,000	7	7	116
Erie, preferred.	8,536,910	7	7	116
Evansville and Crawfordsville, pref.	100,000	11	11	116
Hannibal and St. Joseph, pref.	5,255,836	7	7	116
Harrisburg and Lancaster* guar.	1,182,550	7	7	116
Houston, preferred.	1,180,000	8	8	116
Huntington & Broad Top Mountain, preferred.	190,750	7	7	116
Joliet and Chicago* guar.	1,500,000	7	7	116
Joliet and Northern Indiana* guar.	300,000	8	8	116
Lackawanna and Bloomsburg, pref.	500,000	7	7	116
Leeds and Farmington* guar.	2,646,100	7	7	116
Little Schuylkill* guar.	948,703	9	9	116
Louisville, Cincinnati and Lexington, preferred.	282,250	12	12	116
Marietta and Cincinnati, 1st pref.	6,586,135	6	6	116
" 2d pref.	4,051,744	6	6	116
Manchester and Lawrence* guar.	1,000,000	9	9	116
Michigan Southern, guaranteed.	586,800	10	10	116
Mill Creek and Mine Hill* guar.	323,375	10	10	116
Minneapolis and St. Paul, preferred.	9,744,268	7	7	116
Mine Hill and Schuylkill Haven* guar.	3,775,000	8	8	116
Mount Carbon & Ft. Carbon* guar.	282,250	12	12	116
New Haven and Northampton*.	1,244,000	2	2	116
New York and Harlem, pref.	1,500,000	8	8	116
Niagara Bridge and Canandaigua* guar.	1,000,000	6	6	116
North Eastern (S. C.), preferred.	155,000	8	8	116
Ogdenburg and L. Champlain, pref.	1,037,000	8	8	116
Ohio and Mississippi, pref.	5,500,000	7	7	116
Patterson and Hudson* guar.	630,000	8	8	116
Patterson and Ramapo* guar.	245,000	8	8	116
Peoria and Bureau Valley* guar.	1,200,000	6	6	116
Philadelphia and Erie* guar.	5,996,700	10	10	116
Philadelphia and Reading, pref.	1,551,800	10	10	116
Philadelphia and Trenton* guar.	1,099,120	10	10	116
Pittsfield and North Adams* guar.	450,000	6	6	116
Port. & Kennebec (Yarmouth) guar.	292,400	6	6	116
Portland, Sag. & Portsmouth* guar.	1,500,000	6	6	116
Portsmouth and Concord*.	350,000	7	7	116
Richmond, Fredericksb. & Potomac, guaranteed.	142,900	7	7	116
Rochester and Genesee Valley*.	557,580	7	7	116
Rutland, preferred.	2,040,000	7	7	116
St. Louis, Alton and T. H., pref.	445,566	6	6	116
Standusky and Cincinnati, pref.	676,050	6	6	116
Schuylkill Valley* guar.	869,450	6	6	116
Shamokin Valley & Pottsville* guar.	1,390,000	7	7	116
Tol. Peoria & Warsaw (W. D.) pref.	1,200,000	7	7	116
" (K. D.) pref.	1,200,000	7	7	116
Toledo, Wabash and Western, pref.	1,000,000	7	7	116
Troy and Greenbush* guar.	274,000	8	8	116
Vermont and Canada* guar.	2,500,000	8	8	116
Warren* guar.	1,408,300	7	7	116
White Mountains, guar.	200,000	6	6	116
Wright, York & Gettysburg* pref.	317,050	2	2	116
CANAL STOCKS:				
Delaware Division* guar.	1,633,350	8	8	116
Morris, preferred.	1,175,000	10	10	116
Schuylkill Navigation, pref.	2,888,997	6	6	116
Union, preferred.	600,000	6	6	116
MISCELLANEOUS STOCKS:				
Cumberland Coal, pref.	1,774,400	7	7	116
Mariposa Mining, pref.	1,774,400	7	7	116

WHOLESALE PRICE CURRENT.

IRON—DUTY: Bars, 1 to 1½ cents per lb.; Railroad, 70 cents per 100 lb.; Boiler and Plate, 1½ cents per lb.; Sheet, Band, Hoop and Scroll, 1½ to 1½ cents per lb.; Pig, \$9 per ton; Polished, 3 cents per lb.

Pig, Scotch, No. 1.....per ton.33 @ 36-
Pig, American, No. 1.....@ 32-
Pig, American, No. 2.....@ 31-
Pig, American, Forge.....@ 29-
Bar, Refined, English and American.....@ 75-
Bar, Swedes, assorted sizes.....(gold).85 @ 100-

STORE PRICES.

Bar, Swedes, ordinary sizes.....@ 110-
Bar, Refined.....80 @ 85-
Bar, Common.....75 @ 80-
Scroll.....97 50 @ 130-
Ovals and Half-round.....100 @ 125-
Band.....95 @ 100-
Horse Shoe.....95 @ 100-
Rods, 1½ to 16 inch.....85 @ 120-
Hoop.....105 @ 150-
Nail Rod.....per lb. 7 @ 74-
Sheet, Russia, as to No.'s.....(gold).11 @ 114-
Sheet, Single D. and T. Common.....44 @ 6-
Rails, English.....(gold).57 @ 59-
Rails, American, at Works in Penna. c'y. 70 @ 71-
Anvils, (Eagle).....per lb currency. 8 @ -

STEEL—DUTY: Bars and Ingots, valued at 7 cents per lb., or under 24 cents; over 7 cents and not above 11, 3 cents per lb.; over 11 cents, 3½ cents per lb., and 10 per cent. ad val. (Store prices.)

English, Cast, (2d and 1st quality) per lb. 15 @ 18-
English Spring (2d and 1st quality).....7 @ 10-
English Blister (2d and 1st quality).....10 @ 17-
English Machinery.....11½ @ 14-
English German (2d and 1st quality).....13 @ 15-
American Blister "Black Diamond".....@ 12-
American, Cast, Tool, do.....@ 17-
American, Spring, do.....9 @ 11-
American Machinery do.....@ 12-
American German do.....9 @ 12-

NAILS—DUTY: Cut, 1½; Wrought, Horse Shoe, 2½ 5 cents per lb. (Cash.)

Cut, 4d. @ 10d.....per 100 lb 4 37½ @ 4 50
Cinch.....5 87½ @ 6-
Horse Shoe, Forged (No. 10 to 6).....per lb. 23 @ 28-
Copper.....@ 37-

TIN—DUTY: Pig, Bars and Block, 15 per cent. ad val.; Plate and Sheets and Terne Plates, 25 per cent. ad val.

Banca.....(gold).@ 35-
Strait.....(gold).31½ @ 32-
English.....(gold).31½ @ 32-
Plates—Fair to good brands.....(gold).Currency.
I. C. Charcoal.....per box. 8 25 @ 8 75 9 75 @ 10 25
I. C. Coke.....7 25 @ 8 50 8 50 @ 9 60
Coke Terne.....5 65 @ 6 75 6 75 @ 7 75
Charcoal Terne.....7 50 @ 8 9 9 @ 9 60

PETROLEUM—DUTY: Crude, 20 cents; Refined 40 cents per gallon.

Crude, 40 @ 48 gravity (in bulk), per gall. 12 @ -
Crude, 40 @ 47 gravity (in shipping order) 16 @ 16½
Refined, prime L. S. to W. (110 @ 115 test) 23½ @ -
Refined, Standard White (in ship'g order) 24 @ -
Refined, prime White (in shipping order) 26 @ -
Refined, S. W. (in jobbing lots).....@ -
Refined, S. W. (in tin).....27½ @ 28-
Naphtha, Refined, (65 @ 73 gravity).....9 @ -
Residuum.....per bbl. 4 @ -

GLASS—DUTY: Cylinder or Window Polished Plate, not over 10 by 15 inches, 2½ cents per sq. foot; larger and not over 16 by 24 inches, 4 cents per sq. foot; larger and not over 24 by 30 inches, 6 cents per sq. foot; above that and not exceeding 24 by 30 inches, 20 cents per sq. foot; all above that, 40 cents per sq. foot; on unpolished Cylinder, Crown and Common Window, not exceeding 10 by 15 inches square, 1½; over that, and not over 16 by 24, 2; over that, and not over 24 by 30, 2½; all over that, 3 cents per lb.

American Window. (Single Thick.)

Sizes.	1st.	2d.	3d.	4th.
A.	B.	C.	D.	
6 by 8 to 7 by 9.....	\$7 75	\$7 00	\$6 50	\$6 00
8 by 10 to 10 by 15.....	8 25	7 50	7 00	6 50
11 by 14 to 12 by 18.....	9 75	9 00	8 00	7 00
14 by 16 to 16 by 24.....	10 50	9 50	8 50	7 50
18 by 22 to 18 by 30.....	12 25	11 25	10 00	8 00
20 by 30 to 24 by 30.....	15 00	13 75	11 50	9 00
24 by 31 to 24 by 36.....	16 50	16 00	12 50	10 00
26 by 36 to 30 by 44.....	17 50	16 00	14 50	12 50
30 by 46 to 32 by 45.....	20 00	18 00	15 50	13 50
32 by 50 to 32 by 56.....	22 00	20 00	17 00	14 50
Above.....	25 00	25 00	20 00	16 00

(The above subject to a discount of 55@60 per cent.)

French Window—1st, 2d, 3d and 4th qualities.

(Single Thick.)	(New List, Aug. 20th.)
Sizes.	per 50 feet.10 @ 7 75
6 by 8 to 8 by 10.....	4 qts. @ 7 75
8 by 11 to 10 by 15.....	4 qts. @ 8 -
11 by 14 to 12 by 18.....	4 qts. @ 9 25
14 by 16 to 16 by 24.....	4 qts. @ 9 75
18 by 22 to 18 by 30.....	4 qts. @ 10 50
20 by 28 to 24 by 30.....	4 qts. @ 10 12
26 by 24 to 24 by 36.....	4 qts. @ 12 50
26 by 34 to 26 by 40.....	3 qts. @ 16 50
28 by 38 to 28 by 44.....	3 qts. @ 17 -
28 by 46 to 30 by 45.....	3 qts. @ 18 -
30 by 50 to 32 by 52.....	3 qts. @ 19 50
32 by 54 to 34 by 56.....	3 qts. @ 20 -
34 by 58 to 34 by 60.....	3 qts. @ 22 -
36 by 60 to 40 by 60.....	3 qts. @ 28 -

(Subject to a discount of 55@65 per cent.) English sells at 40@50 per cent. off the above rates.

New York Stock Exchange.

Actual Sale Prices for the week ending Nov. 2.

	Th. 27.	F. 28.	Sat. 29.	M. 31.	Tu. 1.	W. 2.
Canton Co.....	68	68	67½	67½	67½	67½
Central Pacific 6a.....	103	90½	90½	91	91	91
Central of N. Jersey.....	108½	108½	107½	108½	109	108½
Chicago & Alton.....	115½	115½	115½	115½	115½	115½
.. pref.....	116½	116½	116½	116½	116½	116½
.. 1 M.....	102	102	102	102	102	102
.. S. F.....	102	102	102	102	102	102
.. Inc. bds.....	151	151	151	151	151	151
Chicago, Burl. & Q.....	151	151	151	151	151	151
.. 8a, 1883.....	79½	79½	79½	80½	80½	79½
Chic. & Northwestern.....	80½	80½	87½	88½	88½	88½
.. pref.....	88½	87½	87½	88½	88½	88½
.. 1st M.....	84½	84½	84½	84½	84½	84½
.. S. F.....	94½	94½	94½	94½	94½	94½
.. Consol.....	110	110	110	110	110	110
Chic. Rock Isl. & Pac.....	110	109½	110	110½	110½	110½
Chi., R. I. & Pa. 7a, 1896 96	110	109½	110	110½	110½	110½
Clev., Col., C. and Ind.....	81½	81½	81½	81½	81½	81½
Clev. and Pittsburgh.....	104½	104½	104½	105	106½	107
.. 2 M.....	100	100	100	100	100	100
.. 3 M.....	100	100	100	100	100	100
.. 4 M.....	100	100	100	100	100	100
Clev. and Toledo.....	100	100	100	100	100	100
.. S. F. 7a.....	100	100	100	100	100	100
Col., Chi., & Ind. C.....	17½	17½	17½	17½	17½	17½
.. 1 M.....	78½	78½	78½	78½	78½	78½
.. 2 M.....	78½	78½	78½	78½	78½	78½
Cumberland Coal pref.....	120	120	120	120	120	120
Del. & Hudson Canal.....	120	120	120	120	120	120
Del. Lack. & Western.....	108½	108	108½	109½	109½	109½
.. 1 M.....	99½	99½	99½	99½	99½	99½
.. 2 M.....	99½	99½	99½	99½	99½	99½
Dubuque & Sioux City.....	22½	22½	22½	22½	22½	22½
Erie Railway.....	22½	22½	23	23	23	23½
.. pref.....	47½	47½	49½	49½	49½	49½
.. 1 M. 7a, 1897.....	100	100	100	100	100	100
.. 2 M. 7a, 1879.....	100	100	100	100	100	100
.. 3 M. 7a, 1883.....	100	100	100	100	100	100
.. 4 M. 7a, 1880.....	100	100	100	100	100	100
.. 5 M. 7a, 1888.....	100	100	100	100	100	100
Great Western 2d mort.....	85½	85½	85½	85½	85½	85½
Hannibal & St. Joseph.....	108½	108½	107½	108½	108½	108½
.. pref.....	116½	116½	116½	116½	116½	116½
Hudson River.....	100	100	100	100	100	100
.. 2 M. S. F.....	100	100	100	100	100	100
.. 3 M. 7a, 1875.....	100	100	100	100	100	100
Illinois Central.....	135½	135½	135½	135½	135½	135½
.. bonds.....	135½	135½	135½	135½	135½	135½
Lake Shore & Mich. S. Th. 93½	92½	92½	92½	92½	93	93
Lake Shore Div. bonds. 91	92½	92½	92½	92½	93	93
Marietta & Cin. 1st pref.....	100	100	100	100	100	100
.. 2d pref.....	100	100	100	100	100	100
Michigan Central.....	120½	120½	120½	120½	120½	121
.. S. F. 8a, 1882.....	100	100	100	100	100	100
.. conv. 8a, 1882.....	100	100	100	100	100	100
M. S. and N. I. M. S. F.....	101½	101½	101½	101½	101½	101½
.. 2 M.....	97	97	97	97	97	97
Mariposa Mining Co.....	6	6	6	6	6	6
.. Tr. 10s cts.....	8½	8½	8½	9½	9½	8½
Milw. and St. Paul.....	62½	61½	61	61	62	62
.. pref.....	80½	80½	79½	80½	80½	81½
.. 1st mort.....	93½	93½	93½	93½	93½	93½
.. 2d mort.....	104	104	104	104	104	104
.. 8a.....	104	104	104	104	104	104
.. 7 3-10s con.....	92½	92½	92½	92½	92½	92½
Missouri 6a.....	91½	91½	91½	91½	91½	91½
.. H. & St. J. iss.....	92½	92½	92½	92½	92½	92½
Morris and Essex.....	92½	92	92½	92	92	92
.. 1st mort.....	100	100	100	100	100	100
.. 2d mort.....	100	100	100	100	100	100
New York Central.....	100	100	100	100	100	100
.. 7a, S. F. 1876.....	100	100	100	100	100	100
.. 7a, conv. 1876.....	100	100	100	100	100	100
.. 6a, S. F. 1883.....	100	100	100	100	100	100
.. 6a, S. F. 1887.....	100	100	100	100	100	100
N. Y. Cen. & Hud. Riv. 92½	92½	91½	91½	91½	91½	91½
.. certificates.....	86½	86½	86½	86½	87½	87½
N. York and Harlem.....	133½	133½	134	134	134	134
.. pref.....	100	100	100	100	100	100
.. 1 M. 7a, 1873.....	100	100	100	100	100	100
N. Carolina 6a.....	100	100	100	100	100	100
.. new.....	100	100	100	100	100	100
Ohio and Miss.....	31½	32	32½	32½	32½	32½
.. pref.....	100	100	100	100	100	100
.. 1st M.....	100	100	100	100	100	100
Pacific Mail S. S. Co.....	42½	42½	41½	42½	43	42½
Panama.....	74	74	74	74	75	75
Phila. and Reading.....	100½	99½	99½	100½	101½	100½
Pitts., Ft. W. & Chi. gtd. 93½	93½	93½	93½	93½	93½	93½
.. 1 M.....	97	97	97	97	97	97
.. 2 M.....	97	97	97	97	97	97
.. 3 M.....	97	97	97	97	97	97
Quicksilver Mining Co.....	97	97	97	97	97	97
St. L., Alton & T. H.....	97	97	97	97	97	97
.. pref.....	95	95	95	95	95	95
.. 1 M.....	95	95	95	95	95	95
.. 2 M pref.....	95	95	95	95	95	95
.. Income bds.....	95	95	95	95	95	95
Tennessee 6a.....	62½	60½	62½	62½	62½	62
.. new.....	60½	60½	60½	60½	60½	60½
Tol., Wab. & Western.....	52½	51½	51½	52	52½	52½
.. pref.....	90½	90½	91	91	91	91
.. 1 M.....	90½	90½	91	91	91	91
.. 2 M.....	90½	90½	91	91	91	91
.. Equipment.....	90½	90½	91	91	91	91
Union Pacific.....	24½	24	24½	24½	24½	23½
.. 1st mort.....	83	83	83	83	83	83
.. L. Gt. 7a.....	73½	73½	73½	73½	73½	73½
.. Inc. 10a.....	72½	72½	72½	72½	72½	72½
Virginia 6a, ex-coupon.....	63½	65	64	64	64	64
.. new.....	64	64	64	64	64	64

New York Stock Exchange.

Actual Sale Prices for the week ending Nov. 2.

Th. 27. F. 28. Sat. 29. M. 31. Tu. 1. W. 2

FEDERAL STOCKS:—

U. S. 6s, 1871, reg.	106	106	106	106	106
U. S. 6s, 1871, coup.	107	107	107	107	107
U. S. 6s, 1874, reg.	107	107	107	107	107
U. S. 6s, 1874, coup.	108	108	108	108	108
U. S. 6s, 10-40s, coup.	106	106	106	106	106
U. S. 6s, 10-40s, reg.	106	106	106	106	106
U. S. 6s, 1881, reg.	113	113	113	113	113
U. S. 6s, 1881, coup.	113	113	113	113	113
U. S. 6s, '81, O.W.L.y.	113	113	113	113	113
U. S. 6s, 1881, . . . y.	113	113	113	113	113
U. S. 6s, 5-20s, reg. '62	108	108	108	108	108
U. S. 6s, 5-20s, c. 1862, 112	112	112	112	109	109
U. S. 6s, 5-20s, reg. '64	107	107	107	107	107
U. S. 6s, 5-20s, c. 1864, 111	111	111	111	107	107
U. S. 6s, 5-20s, reg. '65	111	111	111	108	108
U. S. 6s, 5-20s, c. 1865, 111	111	111	111	108	108
U. S. 6s, 5-20s, r. n. '65, 110	110	110	110	110	110
U. S. 6s, 5-20s, c. n. '65, 110	110	110	110	110	110
U. S. 6s, 5-20s, reg. '67, 110	110	110	110	110	110
U. S. 6s, 5-20s, c. n. '67, 110	110	110	110	110	110
U. S. 6s, 5-20s, reg. '68	110	110	110	110	110
U. S. 6s, 5-20s, c. '68, 110	110	110	110	110	110
U. S. 6s, Pac.R.R. issue	111	110	110	111	111

Philadelphia Stock Exchange.

Actual Sale Prices for the week ending Nov. 1.

W. 26. Th. 27. F. 28. Sat. 29. M. 31. Tu. 1

Catawissa	38	38	38	38	38
Camden and Amboy	116	116	116	116	116
6s, 1870	116	116	116	116	116
6s, 1875	116	116	116	116	116
6s, 1883	116	116	116	116	116
6s, 1889	92	92	92	92	92
mort. 6s, '89	97	97	97	97	97
Elmira & Williamsport	97	97	97	97	97
pref.	97	97	97	97	97
Lehigh Navigation	32	31	31	31	32
6s, 1884	81	81	81	81	81
Gold R. R.	88	88	88	88	88
R. R. L.	88	88	88	88	88
Lehigh Valley R. R.	58	58	58	58	58
6s new coup	98	98	98	98	98
6s new reg.	99	99	99	99	99
Little Schuylkill R.R.	43	42	42	42	43
7s	51	51	51	51	51
Minehill	51	51	51	51	51
Morris Canal	108	108	108	108	108
pref.	108	108	108	108	108
1st mort.	108	108	108	108	108
North Pennsylvania	94	94	94	94	94
6s, 1880	94	94	94	94	94
7s	94	94	94	94	94
10s, 1887	94	94	94	94	94
Northern Central	42	42	42	42	42
Pennsylvania R. R.	60	60	60	60	60
1st M.	108	108	108	108	108
2d M.	108	108	108	108	108
Penn. State, 6s, 1st series	108	108	108	108	108
6s, 2d series, 105	105	105	105	105	105
6s, 3d series	109	109	109	109	109
6s, W. L.	104	104	104	104	104
Philadelphia City, 6s	102	102	102	102	102
new	102	102	102	102	102
Philad. Germ. & Nor.	50	50	50	50	50
Phila. & Reading	50	50	50	50	50
7s, 1883	103	103	103	103	103
Philadelphia and Erie	26	26	26	26	26
6s	26	26	26	26	26
7s	88	88	88	88	88
Schuylkill Navigation	74	74	74	74	74
pref.	16	16	16	16	16
6s, 1882	73	73	73	73	73
6s, 1876	73	73	73	73	73
6s, 1872	73	73	73	73	73
Susq. Canal	1	1	1	1	1
6s, 1878	1	1	1	1	1
Union Canal, pref.	1	1	1	1	1
6s, 1878	1	1	1	1	1
Hestonville, (Horse)	44	44	44	44	44
Chestnut & Wal.	44	44	44	44	44
Green & Coates	25	25	25	25	25
2d and 3d streets	25	25	25	25	25
Spruce and Pine	25	25	25	25	25
15th and 15th sts.	25	25	25	25	25

Baltimore Stock Exchange.

Actual Sale Prices for the week ending Nov. 1.

W. 26. Th. 27. F. 28. Sat. 29. M. 31. Tu. 1

Baltimore City 6s, 1875	91	91	91	91	91
1886	92	92	92	92	92
1890	92	92	92	92	92
1884	92	92	92	92	92
Balt and Ohio	120	120	120	120	120
bonds, 1875	94	94	94	94	94
1880	94	94	94	94	94
1885	92	92	92	92	92
Marietta & Cin. 1st M.	91	91	91	91	91
2d M.	75	75	75	75	75
Northern Central	42	42	42	42	42
bonds, 1885	87	87	87	87	87
1900	87	87	87	87	87
N. W. Va. 1st mort.	87	87	87	87	87
2d mort.	87	87	87	87	87
8d mort.	87	87	87	87	87
City Passenger R. R.	87	87	87	87	87

Boston Stock Exchange.

Actual Sale Prices for the week ending Nov. 2.

Th. 27. F. 28. Sat. 29. M. 31. Tu. 1. W. 2

Boston and Albany	149	149	149	149	149
Boston and Lowell	137	137	137	137	137
Boston and Maine	149	149	149	149	149
Boston and Providence	147	147	147	147	147
Boston, Hartford & Erie	4	3	3	3	3
7s, new	24	23	24	22	22
Cheshire, pref.	83	83	83	83	83
Concord	77	77	77	77	77
Connecticut River	136	136	136	136	136
Eastern	122	122	122	122	122
Fitchburg	132	132	132	132	132
Manchester & Lowell	121	121	121	121	121
Michigan Central	121	121	121	121	121
Northern, N. H.	112	112	112	112	112
Ogdens & Lake Cham.	89	89	89	89	89
pref.	106	106	106	106	106
Old Colony & Newport	97	98	97	97	97
Ph. Wil. & Baltimore	55	55	55	55	55
Portl'd, Saco & Ports.	113	113	113	113	113
Union Pacific	24	23	24	23	23
6s	81	81	81	81	81
Land Grant 7s	73	72	72	72	72
Income 10s	71	70	70	70	71
Vermont & Canada	106	105	105	105	105
Vermont & Mass.	69	69	69	69	69
South Boston (Horse)	98	98	98	98	98
Cambridge	69	69	69	69	69
Metropolitan	69	69	69	69	69
Middlesex	71	71	71	71	71
Central Mining Co.	71	71	71	71	71
Copper Falls	71	71	71	71	71
Franklin	71	71	71	71	71
Huron	71	71	71	71	71
Isle Royale	71	71	71	71	71
National	71	71	71	71	71
Pewabic	71	71	71	71	71
Pittsburg	71	71	71	71	71
Quincy	71	71	71	71	71

London Stock Exchange.

Closing Prices.
Oct. 7. Oct. 14.

All. & Gt. West. N. Y. sec. 7 per ct	65	70	67	70
1st mort., 1880	65	70	67	70
Do. do., 2d mort., 1881	65	70	67	70
Do. Penn., 1st mort., 1877	65	70	67	70
Do. do., 2d mort., 1882	65	70	67	70
Do. Consol. 7 per cent. mort. 1890	27	28	30	31
Detroit and Milwaukee 1st mort. 7s.	70	74	70	74
Do. 2d mort. 8 p. c.	70	74	70	74
Erie shares 100 dol. all paid.	—	—	—	—
Do. steril. 6 p. c. convertible bonds	62	65	62	65
Do. 3d mort. 7 p. c. 1883	—	—	—	—
Illinois Central, 6 per cent., 1875	—	—	—	—
Do. Redemption mort. bonds 6 p. c.	98	100	98	100
Do. 7 per cent., 1875	89	91	89	91
Do. 100 dol. shares, all paid	109	110	109	110
Marietta and Cin. R. R. bonds 7 p. c.	78	82	78	82
New York Central, 100 dol. shares.	—	—	—	—
Panama General mort. 7s, 1897	96	98	93	95
Penn. R. R. bonds, 2d mort. 6 per ct.	95	98	98	98
Do. General mort. 6 p. c. 1910	91	92	91	92
Do. 450 shares	45	48	45	48
Philadelphia and Erie 1st mort. 1881	92	95	92	95
Do. with option to be paid in Phila.	92	95	92	95

American Railroad Journal.

Saturday, November 5, 1870.

Stock Exchange and Money Market.

The Money market has been fairly active, through the week. The offerings of capital have been comparatively liberal for the season, and the prevailing rates have been 5@6 per cent. on call, though exceptional transactions have been reported as low as 4, and as high as 7 per cent. There has been a very moderate supply of prime mercantile paper on the market, and a good inquiry has been noted for the higher grades at 7@8½ per cent. per annum. The City banks, in their last weekly return, showed a gain of nearly three and a half millions in the deposit line, with an addition of over a million to the specie average, and of about five-eighths of a million to the reserve of legal tender notes. At the Treasury Office, the aggregate cash (coin and currency) balances, as officially reported, were about two and three fourth millions more than at the close of the preceding week, standing at \$71,760,815 on Saturday evening, against \$68,976,187 the previous Saturday. The customs revenue at this port for the

week was \$2,072,535, reflecting the diminished importations; and the specie export was only \$308,562. The outflow of coin from the Treasury Office, through the sale of a million of Government gold on Wednesday, the 26th ult., and the week's disbursements of \$3,872,386 of coin-interest, on the November account, without rebate, and \$49,000 in further redemptions of the 1871 bonds, has been \$4,921,386. The Treasury Debt exhibit for Nov. 1, makes the coin balances in control of the Department \$103,131,073, including \$13,866,500, represented by outstanding coin-certificates. The reduction of the public indebtedness, during October, was \$5,129,297, and since March 1, 1870, \$96,544,122.

The specie reserve of the city banks according to the latest return is \$13,108,406, against \$21,928,046 same time last year. The city bank deposits are now \$193,077,808, against \$180,828,832 week ending Oct. 30 1869. The legal tender reserve amounts to \$53,009,099, against \$53,177,883 same time last year. The circulation now stands at \$32,420,509, against \$24,136,249 same time last year. The loans are now \$265,979,485, against \$250,948,883 at this date last year. The Bank Exchanges at the Clearing House through the past week, averaged \$88,283,140 a day, against a daily average of \$87,257,885 the preceding week. The current weeks' exchanges average about 88½ millions a day. The city banks, last week, reported a gain of \$1,160,293 of specie, \$3,498,825 of deposits, and \$618,287 of legal tender notes. They increased their loans \$314,089; and reduced their circulation, \$96,557.

The coin reserves of the Treasury Department on Monday were \$103,131,073, including about 13½ millions on deposit on private account; currency balances, \$26,815,384.

National Bank notes to the amount of \$641,170 were issued last week by the Treasury Department, making the total issue to 1,692 banks thus far, amount to \$335,182,438, against \$282,555,440 at the close of the fiscal year ending June 30, 1866. From the total issue is to be deducted the currency returned, including worn out notes, amounting to \$33,293,079 leaving, with the existing 1,612 banks, (having an aggregate capital of \$427,235,701,) an actual circulation at this date, of \$301,889,359. The United States bonds held by Treasurer Spinner in trust for National Banks as security for circulating notes amount to \$344,596,550; and for the public deposits, \$16,481,050—making a total of \$361,078,600. The Treasury Department last week redeemed and destroyed \$333,516 of worn and mutilated fractional currency, and issued \$974,375 of new.

The U. S. Sub-Treasury receipts, week ending with Oct. 29, were \$6,022,434 in coin, (including \$2,070,000 from customs duties,) and \$4,497,301 in currency; payments, \$2,487,642 in coin, (including \$— of coin interest,) and \$5,247,416 in currency; balance at the close of the week, included \$65,171,734, of coin, against \$61,636,942 the preceding Saturday, and \$6,589,081 of currency, against \$7,339,196 at the close of the preceding week. The business of the Office on the first two days of the current week, was as follows. On Monday, receipts, \$540,422 in coin, (including \$502,000 from customs,) and \$416,983 in currency; payments \$56,293 of coin (including

of coin interest), and \$536,572, of currency. On Tuesday, receipts, \$428,102 in coin (including \$406,000 from customs), and \$807,274 in currency; payments, \$4,243,359 in coin (including \$4,186,299 of coin interest) and \$305,725 of currency. The balance at the close of business on Tuesday included \$6,971,041 of currency, and \$61,840,106 of coin, against a balance a week previous of \$7,194,823 currency, and \$63,071,130 coin.

The aggregate receipts of the U. S. Sub-Treasury in October were \$51,530,870, including \$11,724,402 from customs; aggregate payments, \$47,417,085, including \$2,112,636 of coin interest.

The U. S. Sub-Treasurer issued in October \$4,934,500 of coin certificates.

The U. S. Sub-Treasurer retired, last week, \$1,776,661 of coin certificates, received for customs.

Government revenues have been yielding less satisfactorily. The excises, during the week yielded about $2\frac{3}{4}$ millions; customs at the port of New York, \$1,932,661, and at the outports about \$650,000 (in coin) more, making the grand total income for the week equal to about \$5,655,498 in currency. The income of the Government, from excises, since July 1, 1870, has been about 64 millions.

Gold has been in less confident speculative demand and has receded from $112\frac{1}{8}$ to $110\frac{3}{8}$, under the more liberal offerings, largely of the November coin interest disbursements on account of the public debt. The customs and export call has been less active. Toward the close, the tendency was decidedly downward, and the final quotation on Wednesday was $110\frac{3}{8}$, against 112 the preceding Wednesday. Early on Monday, the Government financial programme for November was made public. It provided for sales, during the current month, of five millions of Gold, as follows: Wednesday, November 2, \$1,000,000; Wednesday, November 9, \$1,000,000; Wednesday, November 16, \$1,000,000; Wednesday, November 23, \$1,000,000; Wednesday, November 30, \$1,000,000. And purchases of four millions of Five Twenties, as follows: Thursday, November 3, \$1,000,000; Thursday, November 10, \$1,000,000; Thursday, November 17, \$1,000,000; Thursday, November 24, \$1,000,000. On Wednesday, Government marketed \$1,755,000 of gold at from 111.01 to 111.05 . The bids reached an aggregate of \$5,025,000. This was the opening sale of the month, under the November programme. The aggregate of the November interest obligations on the public debt is \$23,851,629, of which the New York office has already paid off \$1,356,397 with and \$5,060,000 without rebate. There has been less stringency in the Gold Loan market, and rates have been more comfortable for borrowers.

The export drain last week was \$303,562 against \$556,180 week ending Oct. 22; \$654,323 week ending with Oct. 15; \$802,174 week ending with Oct. 8; and \$465,260 week ending with Oct. 1. The shipments thus far this year have been about $51\frac{1}{2}$ millions, against $28\frac{3}{8}$ millions same time in 1869; $66\frac{3}{4}$ millions same time in 1868; $43\frac{1}{4}$ millions same time in 1867; nearly $54\frac{3}{4}$ millions same time in 1866; and $25\frac{1}{2}$ millions same time in 1865. The exchanges at the Gold Exchange Bank, which were $53\frac{1}{4}$ millions on Thursday of last week, were $52\frac{1}{2}$ millions on Saturday, $32\frac{1}{2}$

millions on Monday of this week, and nearly $62\frac{3}{4}$ millions on Tuesday. On Wednesday they were $46\frac{1}{2}$ millions.

The customs demand for Gold last week, averaged \$345,000 a day; thus far, this week, it has averaged \$454,000, a day, or equal to a weekly aggregate of \$2,624,000. The arrivals of specie from Europe, Havana and other foreign ports, during the week were \$133,668; and since Jan. 1, 1870, \$8,627,378, against \$14,711,836 same time in 1869. The total customs revenue of the Government, in coin, at this port, since Jan. 1, has been \$121,747,892 against \$113,442,993, same time in 1869.

The exports of specie, from this port, last week, were \$303,562 against \$684,653 same week last year; and since Jan. 1870, \$51,546,311, against \$28,564,035 same time in 1869. Government disbursed last week through the U. S. Sub-Treasury here, on account of the coin interest on the public debt \$3,872,386; and since Jan. 1, 1870, \$72,013,267 against \$76,939,086 same time in 1869.

The customs revenue at the port of San Francisco, from Jan. 1 to Oct. 20th, was \$6,587,383, against \$6,863,709 same time last year.

The specie exports by steamer and railway, from San Francisco, from Jan. 1, 1870 to Oct. 20th, were \$28,317,627, against \$32,648,012 same time last year.

The foreign exchange market has been quoted firmer, with quite moderate offerings of bills reported. The demand, however, has been on a restricted scale, and has been mainly for remittances on account of the November 5-20 coupons, received from foreign owners. Bankers' sixty day bills on London closed on Wednesday at $109\frac{1}{2}$ to $109\frac{3}{8}$; sight bills on London, $109\frac{3}{4}$ to 110 . The offerings of produce bills have been rather freer. The week's exports of domestic produce have been to the currency value of \$3,856,163, and since January 1, 1870, \$152,948,422 against \$164,255,751, same time in 1869.

The dealings in the Public Funds have been comparatively limited, in the open market, since our last; and influenced, in part, by the fall in Gold, prices have yielded a fraction, closing dull, but about steady at the modified rates for all issues, save the Ten-Forties, which attracted considerable attention, in view of the decision of the Secretary of the Treasury to allow issues of currency to the extent of 90 per cent. of the face value of those bonds, or equal to that allowed upon the six per cent. bonds. This arrangement will probably lead to an extensive substitution by the banks of Ten-forties in place of the Six per cents, now deposited as the basis of circulation.

Government closed the October bond purchases by buying in two millions of Five-twenties on Thursday of last week, out of an aggregate offering of about $8\frac{1}{4}$ millions, at equal to about the open market rates. It commenced its November purchases on Thursday of the current week.

U. S. sixes of 1881 closed here on Wednesday of the current week at $113\frac{1}{2}$ to $113\frac{3}{4}$; U. S. Five-Twenties of 1862, ex-coupon 109 to $109\frac{1}{2}$; U. S. Five-twenties of 1864 ex-coupon at $107\frac{1}{2}$ to 108 ; U. S. Five-Twenties of 1865 ex-coupon at 108 to $108\frac{1}{2}$; U. S. Five-twenties of 1865 consolidated, $110\frac{1}{2}$ to $110\frac{3}{4}$; U. S. Five-Twenties of 1867, $110\frac{1}{2}$ to $110\frac{3}{4}$; U. S. Five-twenties of 1868, $110\frac{3}{4}$ to

$110\frac{3}{4}$; U. S. Ten-forties at $106\frac{3}{8}$ to 107 ; U. S. Six per cent. currency bonds, 111 to $111\frac{1}{4}$.

State bonds have been in limited demand, through the week, but have been quoted about steady.

Railway bonds have been in fair investment request, at well supported prices. Central Pacific Sixes have been quite active, closing buoyantly on Wednesday at 91 to $91\frac{1}{2}$. The Union Pacific Sixes closed on Wednesday at $82\frac{3}{4}$ to 83 . The registered First Mortgage bonds of the Chesapeake and Ohio Railroad have been in moderate demand for investment purposes at 90 per cent. and accrued interest.

Railway and miscellaneous share property has been moderately active but quite variable in price, closing dull and irregular.

The latest quotations at the London Stock Exchange compare as follows with former returns:

	Oct. 19.	Oct. 26.	Nov. 2.
Consols	$92\frac{3}{8}$	$92\frac{1}{2}$	$92\frac{3}{4}$
U. S. 5-20's of 1862...*	$89\frac{1}{2}$	$89\frac{1}{2}$	$89\frac{1}{4}$
U. S. 5-20s, 1865....*	$88\frac{3}{4}$	$88\frac{1}{2}$	$88\frac{1}{2}$
" 1867	$89\frac{3}{8}$	90	—
" 10-40s	$87\frac{1}{2}$	$87\frac{1}{4}$	87
Erie	$18\frac{3}{4}$	$18\frac{3}{4}$	$18\frac{1}{4}$
Ill. Central.....	114	114	$110\frac{1}{2}$
At. and Gt. West....	30	$29\frac{1}{2}$	$28\frac{1}{2}$

* Ex-Coupon.

At Frankfort on Wednesday, U. S. Five Twenties were quoted at $95\frac{3}{8}$.

There has been less animation in the line of foreign goods without any marked changes in values. The dry goods entries at this port, last week, were \$1,913,931, making with the general merchandise imports, a total of \$5,272,080 against \$6,310,229 the preceding week.

Ocean freights have been fairly active and quoted firmer. For Liverpool we quote flour at 2s. 6d. by sail, and 3s. by steamer per bbl.; grain at $9@9\frac{1}{4}$ d. by sail, and $10@10\frac{1}{4}$ d. by steamer per bushel; cotton at $\frac{1}{4}$ d. to $\frac{5}{8}$ d. by sail and $\frac{1}{2}$ d. to $\frac{3}{4}$ d. by steamer per lb.; and heavy goods 20s. to 30s. by sail, and 30s. to 45s. by steamer, per ton. Total number of vessels in port on Wednesday, 457.

The following will show the exports (exclusive of specie) from New York to foreign ports for the week ending November 1st, and since the beginning of the year:

	1869.	1870.
For the week	\$4,132,157	\$3,856,163
Previously reported..	160,123,594	149,092,259

Since Jan. 1

The imports for the week ending Oct. 29, and since the beginning of the year, have been as follows:

	1869.	1870.
Dry goods	\$1,630,309	\$1,913,931
Gen. merchandise.....	2,422,111	3,358,149

Total for the week....

Previously reported....

Since January 1.....

The following quotations of sales of Railway and other securities are in addition to those given elsewhere in our columns:—

New York.—Arkansas 7s issued to Little Rock and Fort Smith R. R., 66; South Carolina 6s, new Jan. and July, 67; N. Y. State 7s, Bounty loan reg., 107 $\frac{1}{2}$; Ohio 6s, 1881, 108; Pacific R. R. 7s, guar. by Mo., 96; Ohio and Miss. consol. bonds,

87½; Toledo, Peoria and Warsaw W. D., 80; do. 2d mort., 66; New York and New Haven R. R., 155; do., scrip, 143½; do. 6s, 97; Peninsula R. R. 7s, 90; Jefferson R. R. 1st mort., 90¾; Morris and Essex const. bonds, 89; Cleveland, Painesville and Ashtabula 7s, new, 91¾; Great Western 1st mort., 1888, 89; Joliet and Chicago 8s, 106; North Missouri 1st mort., 86¼; St. Louis, Jacksonville and Chicago 1st mort., 92; Albany and Susq. 2d mort., 93; Norwich and Worcester R.R., 104; Western Union Telegraph, 39¾; Am. Mer. Union Exp., 44; Adams Express, 67½; Wells Fargo Exp., 37; U. S. Exp., 35; Brooklyn 6s, W. L., 93½; American Coal, 36; Central gold, 0.15; Grass Valley gold, 0.26; Smith and Parmalee gold, 0.69.

Philadelphia.—West Jersey 7s, 95¼; Lehigh Nav. conv. loan, 78½; Wilmington and Reading 7s, 90¼; Philadelphia and Reading 6s, 1843 '80, 97½; Pennsylvania and New York Canal 7s, 91½; Sunbury and Erie 7s, 101½; Harrisburg and Lancaster 6s, 95; Connecting R. R. bonds, 83; Oil Creek and Allegheny River R. R., 45; do., 7s, 81; Delaware Division Canal, 45; Tioga, 50; Philadelphia City 6s, prior to 1862, 103; Shamokin Coal, 4½; Big Mt. Coal, 5½; Fulton Coal, 4½. The latest quotations are: City 6s, 101½@102¼; do. free of tax, 102¼@102¾; State 5s, coupon, 103@104; do. 6s, W. L., 104¼@105; do. 1st series, 104@105½; do., 2d series, 105½@106½; do., 3d series, 109@110; Reading, 50¼@50¾; do., 7s, 1893, 102½@103½; do., mort. 6s, 1880, 97@97½; Camden and Amboy, 115½@115¾; do., mort. 6s, 1889, 94@94½; do., 1883, 92@93; do., 1889, 92@93; Penn. R. R., 58@58½; do., 1st mort., 105@—; do., 2d mort., 100½@101½; Little Schuylkill R. R., 42½@42¾; Morris Canal, 25@30; do. pref., 65@70; do., 6s, 80@84; do., scrip 7s, 65@—; Susquehanna Canal, 5¾@6½; do., 6s, 45@47; Schuylkill Nav., 7@8; do., pref., 16@16½; do. 6s, 1882, 73¼@74; Elmira and Williamsport pref., 39@40; do., 7s, 1873, 92@92¼; do., 5s, 58@60; Lehigh Coal and Navigation, 32½@32¾; do., 6s, 1884, 83@83½; do., R. R. Loan, 87@88; do., Gold Loan, 89@89½; North Pennsylvania, 42½@43; do., 6s, 98@100; do., 7s, 89½@90¾; do., Chattle 10s, 111@—; Philadelphia and Erie, 26¼@26¾; do., 6s, 91@—; Minehill, 51½@52; Catawissa, 12@15; do. pref., 38½@38¾; Lehigh Valley, 57½@58; do. 6s, 100¼@—; do., 6s, reg., 99@99½; Fifth and Sixth streets, (horse,) 37@40; Second and Third, 51@52; Thirteenth and Fifteenth, 22@23; Spruce and Pine, 24@25; Green and Coates, 38@40; Chestnut and Walnut, 44@45; Hestonville, 14½@15; Union, 43@—.

Boston.—Old Colony and Newport 6s, 96; Phila., Wil. and Balt. 6s, 1887, 94¾; Cedar Rapids and Missouri 7s, 1916, 88¼; Cincinnati, Sandusky and Cleveland R. R., 17½; do., 7s, 1890, 73½; Eastern R. R. 6s, 1874, 99; Vermont Central 1st mort., 85; Vermont Central and Vermont and Canada 8s, 102¾; Mansfield and Framingham R. R. 7s, 93½; Dixon, Peoria and Hannibal R. R. 8s, 1889, 97; Indianapolis, Bloomington and Western 7s, 82½; Vermont and Massachusetts 6s, 1883, 92¼; Burlington and Missouri River R. R., 8s, 1889, 102½; Norwich and Worcester R. R., 103½; Eastern (N. H.) R. R., 117¼; Indianapolis and Cincinnati R. R., 7; Conn. and Pass. Rivers pref., 84; Summit Branch, 36¼; Boston Water Power Co., 16; Cary Imp., 8; Massachusetts 5s,

1894, gold, 95¼; do., 6s, 1872, gold, 106¾; New Hampshire 6s, 1884, 95¾; Maine 6s, 1889, 97¾; Boston 6s, 1880, currency, 100½; do., 5s, 1877, gold, 95½; Worcester 6s, 1880@1885, 99¼; Albany 6s, 1896, 92; Bangor 6s, 1874, 95; Portland 6s, 1877, 95¼; do., 1887, 90¾; St. Louis 6s, 1888, 85¾; Hartford 6s, 1889, 96¾; Brooklyn 7s, 1904, 100½; do., 6s, 1892, 92¼; Chicago 7s, 98; St. Louis Co. 7s, 1885, 95; Cincinnati 6s, 1886, 92; Cook Co., Ills., 7s, 1880, 97¾; Hancock Mining Co., 1¾.

Baltimore.—Orange and Alexandria 3d mort. 8s, 82; do., 4th mort., 73½; Western Maryland 2d pref. bonds, 62; Northern Central 6s, 1900, gold, 94; Maryland Defense bonds, 103; Virginia 6s, old, reg., 50¾; Bare Hill Mining Co., 0.09. The latest quotations are: Pittsburg and Connellsville 7s, 1898, 91¾@92¾; Baltimore and Ohio, 126@127; do., 6s, 1875, 94@95; do., 1880, 93½@94¾; do., 1885, 91½@92; Northern Central, 42@43½; do., 6s, 1885, 93@94; do., 1900, 87@87¾; do., 6s, 1900, gold, 92@93½; Parkersburg Branch, —@—; N. W. Va. 1st mort., 94@95; do., 2d mort., 95@—; do., 3d mort., 1885, —@91; Marietta and Cincinnati 7s, 1892, 92@93; do., 2d mort., 71½@72½; Central Ohio, 25@25½; do., 1st mort., 83@—; Western Md. 6s, 1890, 75@77; do., guar., by Baltimore City, 90@92½; do., 2d mort., guar., 88@—; do. 6s, pref., 61¾@63½; do. 6s, guar., by Washington Co., 80@85; Richmond and Danville bonds, 75@77; Orange and Alexandria 1st mort., 6s, 82@82½; do., 2d mort., 6s, 74½@75; do., 3d mort., 8s, 81@82½; do., 4th mort., 8s, 73¼@73½; Orange, Alex. and Manassas 7s, 75@76; Virginia and Tennessee 8s, 83@83½; do., 6s, 1st mort., 81@84; do., 6s, 2d mort., 73@75; Baltimore 6s, 1875, 91½@91½; do., 1884, 90¾@91; do., 1886, 91¾@92; do., 1890, 92@92½; do., 1893, 93@94; do., 1900, 91½@91¾; do., 5s, 1888-'70, 75@79; Memphis City 6s, 56@58; Maryland Defense Loan, 1883, 102¼@103; City Passenger R. R., 19@21; George's Creek Coal, 60@62; Atlantic Coal, 1.50@3.00; Bare Hill, 0.09@1.00.

THE CENTRAL RAILROAD OF IOWA, connecting St. Louis and St. Paul, and running through the finest portion of Iowa, is now nearly completed. The remaining million of its 7 per cent. gold First Mortgage Bonds is now offered at 90 and accrued interest. Parties who desire a strictly first-class investment in one of the very best roads in the country are invited to examine into the merits of this security. It pays fully one-third more interest than governments, which are taken in exchange at the highest market rate.

W. B. SHATTUCK, Treasurer,
32 Pine-st., New York.

After a full examination, we have accepted an Agency for the sale of the above First Mortgage Bonds, and desire to recommend them to our customers AS A THOROUGHLY SAFE AS WELL AS PROFITABLE INVESTMENT. JAY COOKE & Co.

Pamphlets, with map, may be obtained, and subscriptions will be received at the COMPANY'S OFFICES, No. 32 Pine-st., New York; at offices of JAY COOKE & Co., New York, Philadelphia and Washington; the BANK OF NORTH AMERICA, and banking houses of HOWES & MACY, New York.

The Seaboard and Roanoke Railroad Company has declared a semi-annual dividend of 4 per cent., clear of United States tax.

BANKING AND FINANCIAL.

HARVEY FISK.

A. S. HATCH.

OFFICE OF FISK & HATCH,
BANKERS AND DEALERS IN GOVERNMENT
SECURITIES, No. 5 NASSAU ST.,
NEW YORK, Nov. 1, 1870.

THE FUNDING OF UNITED STATES FIVE-TWENTIES into a first-class security, paying the same rate of interest (six per cent., gold), and which cannot be called in under twenty-five years without the consent of the holder, may now be effected at a clear profit of about twenty per cent., by exchanging them for the FIRST MORTGAGE BONDS OF THE CENTRAL PACIFIC RAILROAD COMPANY.

The five-twenties of 1867 are selling to-day at 110, and the Central Pacific Bonds at 91; \$1,000 of the former will buy \$1,000 of the latter, and leave nearly \$200 for use or for re-investment; or \$5,000 of the former, paying \$300 in gold annually, will buy \$6,000 of the latter, paying \$360 in gold annually, and leave a balance in cash of about \$50.

The Central Pacific is a completed, thoroughly-built, well-managed road, doing a large business, and earning an immense revenue. The bonds are well and favorably known, and constantly dealt in, both here and in the chief financial centres of Europe, and they can be disposed of at a quoted market price with the same facility as Government bonds, and are daily quoted at the Stock Exchange.

Having originally negotiated these bonds, and being thoroughly acquainted with their soundness and value, we have introduced them as a specialty in our regular business in connection with our dealings in Government securities, and recommend them without hesitation to our friends and customers desiring to make investments or to fund their five-twenties upon advantageous terms, without reduction of interest.

FISK & HATCH.

CONNECTICUT LOAN.—FIRST MORTGAGE SEVEN PER CENT. BONDS OF THE GRAND THROUGH ROUTE FROM NEW YORK TO BOSTON—issued by the NEW HAVEN, MIDDLETOWN AND WILLIMANTIC R. R. CO. OF CONNECTICUT.

The work on the Road has progressed steadily during the Summer and Fall. More than three-quarters of the line is finished; trains are running regularly between New Haven and Middletown, and it is believed the whole will be open for through business during the coming Spring.

The earnings on the section now in operation prove the capacity of the Road to pay largely over and above its interest liability.

THE NECESSARY FUNDS TO COMPLETE THE UNFINISHED WORK ARE SECURED, WHICH INSURES THE EARLY OPENING OF THE LINE, AND MAKES THE INVESTMENT AS DESIRABLE AS ON A ROAD ALREADY IN OPERATION.

PRICE PAR AND INTEREST.

Bonds can be obtained of any Bank or Banker, or by sending to ourselves.

HATCH & FOOTE,

Bankers and Dealers in Government Securities,
No. 12 WALL ST.

The last rail, completing the Mobile and Chattanooga Railroad between Mobile and New Orleans, was laid on the 29th ult.

Grand Rapids and Indiana Railroad.

The practical, formal opening of a railroad by which more than two hundred miles of direct communication are added to the trade of our city, is an event of more than passing interest.

We have already, through our correspondence, called the attention of our citizens to this work; now, through the sagacity and courtesy of its managers an excursion throws it open to their inspection.

This great work of internal improvement is designed ultimately to form a prominent link in the chain of intercommunication with China and the East Indies generally through the short route of the Northern Pacific Railroad.

Its immediate and to us more important mission is to open to our markets the rich agricultural products of the garden state of the West, its vast fields of pine and other lumber, its stores of plaster, and even the immense resources of iron and copper will be rendered more valuable and available for our purposes.

Like similar projects undertaken some twenty years ago, the line now known as the Grand Rapids and Indiana Railroad, consisted of some three or more corporations, which were merged in 1867. The auspices were considered favorable and under prudent and sagacious management the road might have been placed upon sound financial basis and completed years ago. It issued bonds based upon its land grant; it received liberal donations from villages and other municipal corporations, and citizens subscribed to its stock. Its finances were not husbanded nor judiciously expended, and its bonds, getting into the hands of financiers whose reputation would not admit of their getting further, the company fell into discredit.

Thus it dragged until it came into the hands of Judge Hanna, of Fort Wayne, in 1866, who was elected President in that year. Those who know the reputation and practical ability of this lamented official do not doubt that the measure he planned would have eventuated successfully. His untimely demise, however, destroyed all hopes in that quarter,—the Hon. J. K. Edgerton, of Fort Wayne, became the Judge's successor as President.

Mr. Edgerton brought with him an extended reputation in railroad operations, and a character for honor and integrity unimpeachable and unimpeached. He obtained the assistance of Messrs. Talcott & Co., of Chicago, as contractors, gentlemen of wealth and character, well known in railroad circles. For two long and dreary years the President of the road and the contractors prosecuted the work under the greatest financial embarrassment and discouragement. Promises of aid and assistance, upon which they relied, only met with disappointment, and a most powerful and well planned scheme was laid to defeat the completion of the road, and secure for its projectors the land grant and franchises of the Grand Rapids and Indiana Railroad. Nearly one hundred miles of railroad, parallel to its line, were constructed and legislation obtained, providing for the contingency of the transfer to this adverse interest. Talcott & Co. completed twenty miles of the railroad, from Grand Rapids north, to Cedar Springs in 1867, and although most of the grading, ties, &c., for fifty miles south from Grand Rapids were prepared, the road was brought nearly to a stand still in 1868. The hearts of the schemers rejoiced, but at this junction came the Continental Improvement Company.

This Company, organized in Pennsylvania, with General G. W. Cass for its President, began its operations on the 1st day of May, 1869. In sixty days it had cleared forests, levelled hills, filled morasses, bridged rivers, and constructed complete and equipped, twenty miles of first-class railroad. A work unprecedented even in these days of Pacific energy and engineering. The road was constructed under a receiver, the Hon. Jesse L. Williams, of Fort Wayne (it had found its way into court), by contractors Messrs. Talcott & Co., of Chicago; Mr. Jas. Zimmerman, a Pennsyl-

vanian from Lancaster county, was also one of the contracting party, and Mr. Williams called upon Mr. Godfrey, of Grand Rapids, to assist in a part of the work. The friends of the company were agreeably surprised, and the enemies astounded and confounded. At this stage of proceedings, the parties who had undertaken to gobble the whole of the land grant saw their chances growing small by degrees, with imperturbable cheek, proposed to "withdraw their opposition, provided the Continental Improvement would divide the land grant with them! As the late Col. Diehl would say, "there has been no diev as yet."

The Company then began to look around and examine their property, of which they had little knowledge through their own agents. Ties and timber, delivered many years before, had rotted on the ground. Other, more recently obtained, had been taken by dishonest individuals, they had been used to repair highways, and one lot of seven thousand cross ties carried off bodily to another railroad and sold to another company. There were many unliquidated accounts and many more were claimed. Deeds for right of way had never been recorded and many had been lost or destroyed, and all sorts of claims, legitimate and illegitimate, were made by property owners and interested parties. Our townsman, Mr. D. H. Williams was engaged in securing the timber and property of the company between Fort Wayne and Grand Rapids, and the President of the Railroad Company, assisted by Mr. Williams and others, unravelled and adjusted the almost inextricable confusion into which the right of way question had become involved. In the meanwhile the Continental Company organized the Land Department under the supervision of the Hon. William A. Howard of Detroit, as Commissioner, assisted by the Hon. P. R. L. Pierce, of Grand Rapids. They also placed the company upon a sound financial basis, issuing bonds guaranteed by the Pittsburg, Fort Wayne and Chicago Railway, and for the payment of which they mortgaged their property and pledged the proceeds of the sale of their lands. These securities have already taken rank amongst the first-class securities of the country, and have been taken by moneyed men for investment, and have never been seen in the market in this country. Work was resumed upon the railroad north of Fort Wayne, and early in June, 1870, the road was completed and cars running to Sturgis, fifty-six miles north of Fort Wayne. At about the same date a further section of twenty miles north of Grand Rapids was opened through Big Rapids on the Muskegon river to the City of Paris, which is the present terminus of the road at the north. The excursionists will pass over more than two hundred miles of railroad, all but twenty of which were mainly constructed and entirely completed by a company organized in Pennsylvania, much of the capital being owned here and the officers and the board of directors, with a single exception, Col. Thomas A. Scott, being residents of this city. The officers of the Continental Improvement Company are G. W. Cass, President; Wm. Thaw, Vice President; and W. R. Shelby, Secretary and Treasurer.

By a contract with the Pittsburg, Fort Wayne and Chicago Railroad Co., assumed by the consent of all parties by the Pennsylvania Railroad Co., that company controls the stock of the Grand Rapids and Indiana Railroad Company, and its management is under the control of J. N. McCullough, Esq., as General Manager, who is also General Manager of the Pittsburg, Fort Wayne and Chicago Railway, (Pennsylvania Railroad lessee.)

The officers are J. N. McCullough, Esq., General Manager; Charles E. Gorham, Fort Wayne, General Superintendent; William P. Shinn, Pittsburg, General Freight Agent; F. L. Myres, Chicago, General Passenger Agent. These all hold corresponding situations on the Pittsburg, Fort Wayne and Chicago Railway. They are assisted by H. D. Wallen, of Fort Wayne, and J. L. Shaw, of Grand Rapids, Assistant Superintendents, and

E. P. Vining, of Grand Rapids, Freight Agent, and F. Gorham, of Fort Wayne, Auditor.

Thus Pennsylvania capital and Pittsburg energy has permeated this, hitherto to us, inaccessible region, and restored order out of chaos, and a well organized and equipped railroad now reaches two hundred miles into a country with which we have not had much intercourse. More than half a million of dollars has already been paid to Pittsburg mechanics to build and equip this road. Directly and indirectly, this improvement has been the means of the disbursement of a million of dollars in this vicinity, and yet we could probably count upon our fingers all who have ever heard that there was such a railroad in existence.

As we remarked before, this railroad is designed to connect Fort Wayne in Indiana with the Straits of Mackinac in Michigan. It is literally a back bone passing through the left centre of the latter State for a distance of one hundred miles through one of the proverbially fertile regions of the country, if not of the world.

A correspondent of this paper during the year 1869, wrote as follows of this region:

A BEAUTIFUL COUNTRY.

"Three miles to the north, Fawn river is crossed, and one mile beyond this is the boundary line between the States of Indiana and Michigan. We leave the Mongoguanong Prairie and enter upon the prairies of Michigan, the first of which is Oxbow Prairie, outlying the one in which is located the village of Sturgis. Unlike the general prairie region of the Western States, the prairies of Michigan are underlaid with a gravelly soil, and are almost unaffected by excessive rains or protracted drouth. Notwithstanding the heavy rains which have proven so disastrous the past season to the corn crop of the West generally, owing to the facts above stated, the crop of that cereal upon the prairies of Michigan and of Northern Indiana will be a good average. Winter wheat and fruit, so precarious on the Western prairies, are here sure and profitable. The rich fields of golden wheat, and the trees bending with their loads of luscious fruit, which meet one's gaze in this region, fill the unaccustomed eye with wonder at the profusion with which these gifts of a bountiful Creator have been bestowed upon this favored locality. A generation has not passed since this soil was reclaimed from the savage; yet beautiful villages, highly improved farms, excellent schools, well filled colleges of high rank, long lines of deposit in country banks, show that this community is intelligent, industrious and prosperous; and a contemporary says, speaking of the Nottawa Prairie: 'Michigan abounds, as is well known, with prairies limited in extent as compared with those vast tracts in Illinois and other western States, but equally rich in soil and susceptible of raising winter wheat, fruit and other crops, which fail farther west. Amongst the richest in soil and most picturesque in appearance, is Nottawa Prairie, in St. Joseph county. On the north it is bounded by the St. Joseph river, the luxuriant foliage of the forest trees upon the banks forming a relief to the otherwise somewhat monotonous landscape of the prairie.'"

The City of Fort Wayne, the southern terminus of the road, is located on Wabash and Erie Canal, at the crossing of the Pittsburg, Fort Wayne and Chicago Railway; the Toledo, Wabash and Western, the Cincinnati and Munice, and the Jackson, Lansing and Saginaw Railroads. It contains thirty thousand inhabitants, and is already a place of commercial and manufacturing importance. It will be a very favorable point for the distribution of the immense lumber, plaster and other traffic of the Grand Rapids and Indiana Railroad.

Kendallville is twenty-six miles from Fort Wayne, on the Michigan Southern "Air Line railroad," and is the leading business point in Noble county, Indiana. It contains about five thousand inhabitants, and is one of the most important shipping points between Toledo and Chicago.

Rome City is situated seven miles northwest

from Kendallville, at the outlet of an extensive system of lakes, which cover many miles of ground, and which form a reservoir for a water power which has at this point a fall of twenty-six feet; it is already improved with woolen factories, flouring mills, &c., which, when fully developed, will make this an important point. The village is located on a fine elevated plateau, with a gravelly soil, and there are chalybeate springs, which are said to possess great medicinal virtues. The beautiful lakes, affording many miles for the sports of sailing or rowing, and fishing; delightfully shaded banks, admirably adapted for walks and picturesque drives, seem to justify anticipations which steps have already been taken to realize, to wit: To erect buildings and make it a summer resort for persons seeking health and recreation.

La Grange is the county seat of the rich and fertile county of the same name. This is a very pleasant and prosperous village, situated upon the verge of the beautiful and productive prairie region developed upon the north and west.

Northward six miles brings us to the beautiful village of Lima, situated in the midst of the Mongoguanong Prairie, on the Pigeon river.

Sturgis is fifty-six miles north from Fort Wayne, located upon Sturgis prairie. The Grand Rapids and Indiana railroad crosses the Michigan Southern railroad at this place.

Seven miles north from Sturgis is the picturesque village of Nottawa, delightfully situated on the banks of Sand Lake. Two miles further northward the "Michigan Air Line" Railroad is crossed, a road designed to shorten the distance between Detroit and Chicago upon the Michigan Central Railroad, by cutting off a detour made by the latter to the northward, to reach the villages of Marshall, Battle Creek, Kalamazoo, etc.

Kalamazoo is one of the most beautiful villages in the State, or for that matter, in the country, or anywhere else. There are many blocks of stores, &c., and some very beautiful private residences. The building material chiefly used are the cream-colored, or so called "Milwaukee" brick. It has gas works and Holley water works, and its principal streets are paved with Nicholson pavement. It is the county seat of Kalamazoo county, and the State Lunatic Asylum is located here. It is now an important railroad centre, no less than five roads meeting at this point—Michigan Central, Grand Rapids and Indiana, the Kalamazoo and the White Pigeon; the Kalamazoo and South Haven; the Kalamazoo, Allegan and Grand Rapids; besides these, running from Port Huron, Michigan, to Chicago, Illinois, crosses the Grand Rapids and Indiana, a few miles south of this place.

The Railroad Company design the erection of an engine house, and such other shops and buildings as may be required upon grounds in the south part of the village, donated by Hon. Charles E. Stuart and others.

The branch of the Michigan Southern Railroad is crossed again at Plainwell, eleven miles north from Kalamazoo.

Grand Rapids is the city second in wealth and population in the State of Michigan only to the City of Detroit. It is situated at the head of navigation of the Grand river, which furnishes at this point almost an unlimited amount of power, by means of the rapids or falls, extending along the river three miles. The beds of plaster near this city are almost inexhaustible and now yield about one hundred thousand tons per annum. At this place are located the offices of the Company. Hon. W. A. Howard, formerly member of Congress from Michigan, is Commissioner of the Land Office. The office of Mr. Shaw, Assistant Superintendent, is also located here.

Mr. McQuewan, the well known lumber merchant from this city, has established, in company with Messrs. Long, extensive mills at Grand Rapids.

The country, after leaving the Grand river, assumes the usual feature of a new region just beginning to be developed. The immense piles of lumber, the shingles and lath, exhibit the staple

upon which the country will rely for its immediate prosperity. Embryo villages mark the line of the road in great profusion, and the school houses, church spires and the sign-boards show evidences that literature and religion, commerce and manufactures are already established.

We enter now upon the magnificent domain of the Company, the Land Grant of the Company, thirty miles in width on each side of the road, and comprising altogether more than one million two hundred thousand acres of pine timber lands and agricultural lands, estimated to be worth the round sum of twelve millions of dollars.

Big Rapids, on the Muskegon is looked upon as the city of the future in this region. Pennsylvania enterprise has established itself here; the leading and most enterprising citizen, Mr. John Brown, was formerly in the lumber business in this vicinity, and is well known to many of our citizens.

The Continental Improvement Company, believing that the interests of the railroad would be advanced by the speedy opening and cultivation of their unimproved lands, early in the summer of this year sent the Rev. Dr. Tustin, of St. Mark's (Episcopal) church in Grand Rapids, to Norway, for the purpose of inducing emigration to their lands. His mission has been successful. Sixty males have already arrived, to be employed on the railroad during the winter, and to enter upon their lands in the spring. The families of these immigrants will follow them in the spring, and a large colony will probably be established eventually, as several hundred are preparing to follow at suitable intervals. Liberal provision for their transportation and comfort have been made by the railroad companies, who assist those requiring assistance, to be repaid by labor.

TABLE OF DISTANCES FROM PITTSBURGH AND FORT WAYNE.

	Miles.
Pittsburgh to Fort Wayne.....	320
Fort Wayne to	
Huntertown	12
Avilla	21
Lisbon	26
Kendallville	28
Rome City	35
La Grange.....	46
Lima	52
(MICHIGAN.)	
Sturgis	57
Air Line Crossing.....	67
Mendon	72
Brady	80
Aust. n's Lake.....	85
Kalamazoo.....	93
Plainwell	104
Martin	110
Wayland	120
Grand Rapids	142
Rockford	155
Cedar Springs.....	162
Pierson	169
Howard City	175
Morley.....	182
Big Rapids	197
Paris	202

We cannot conclude this article without referring to some of the advantages that will accrue to persons residing along the line of this new road, by thus being brought into direct communication with Pittsburgh. Our city has long been recognized as the great manufacturing center of the country, and the completion of this new line of travel and transportation brings those distant localities to our very doors, and will enable them to reap many benefits of which they would have otherwise been deprived. Our manufacturers are prepared to meet and supply all the many wants incident to the settlement of a new country, or the requirements for the development and progress of the many thriving cities and villages located along the road. Our iron manufactures include every imaginable article known to the iron trade, all of which can be supplied on terms

more desirable than can be offered in any other place. Our machinists, who are skilled and experienced in the construction of machinery of all kinds, are prepared to supply every demand for engines, saw and grist mills, portable mills, planing machines, and the thousands of other machines which may be required, and can furnish them of such quality of workmanship and at such prices as will defy competition. Our extensive window glass and glass ware manufacturers are also prepared to fill orders no matter how large, while the numerous other articles, impossible to specify which are manufactured here will all find ready sale in the new market thus opened. The residents of the agricultural districts will find all the celebrated inventions, to facilitate and lighten the labors of agriculturists, such as plows, mowers, reapers, horse rakes, sowers, drills, presses, cane mills, etc., manufactured here in great variety and in superior style.

No doubt all the more important articles manufactured here have long been in use throughout the length and breadth of the country traversed by this new road, but now the consumers will have the opportunity of purchasing direct from our manufacturers, and can have their purchases shipped direct without being subjected to the annoyances of dealing through second parties and the delays incident to roundabout means of transportation. Indeed the advantages which will be gained by those living along the line of the road by direct communication with this city cannot be overestimated, and we feel confident that this will become more and more appreciated every day.—*Pittsburg Chronicle*, Oct. 25.

Mobile and Montgomery Railroad.

Messrs. SOUTTER & Co., No. 53 William street offer for sale at 95 and accrued interest, in currency, the unmarketed balance of \$450,000 of the First Mortgage Eight per cent. gold bonds of the Mobile and Montgomery Railroad Company. The purpose of the loan is to complete the connecting link of the road between Tensas, the present terminus, and the City of Mobile, fifteen miles,—and thus to establish through rail connection to Mobile and New Orleans. The road, when extended to Mobile, will be 182 miles in length. The cost of the road is given at over \$30,000 a mile, while the mortgage is very little more than \$13,000 per mile. The road is the only connecting line of railway between Montgomery and Mobile, and is an important link in the great through coast line between New Orleans, Mobile, Montgomery, Savannah, Charleston, Richmond and New York, or the interior line between the same points, via Augusta, Charlotte and Danville. The net earnings of the road are reported as having regularly increased at the rate of about 20 per cent. per annum since the organization in 1867, and are now much more than enough to pay the interest upon all the bonds authorized to be issued, more than one-half of which are in the hands of the company. The State of Alabama gives its indorsement to the bonds of the Company, which are made payable, principal and interest, in gold—the interest semi annually, in May and November, in the city of New York. The bonds are confidently recommended by the bankers of the Company as a most desirable investment. The November interest on these bonds will be paid by Messrs. SOUTTER & Co.

The Chesapeake and Ohio Canal Company have paid the twenty-five per cent. dividend of \$55,000 on the principal of the repair bonds, and have \$40,000 remaining in the treasury. Another dividend of \$55,000 on the repair bonds is proposed to pay on the 1st of January.

List of U. S. Patents.

Issued for Improvements Railroad Construction, Rolling Stock, &c., for the week ending Nov. 1st, 1870, and each bearing that date. Reported weekly for the AMERICAN RAILROAD JOURNAL, from the Office of DAVID A. BURN, Solicitor of Patents and Attorney in Patent cases, Washington City, D. C.

No.

108,777.—Spring Seat for Railway Cars, Thomas J. Gifford, Salem, Mass.

108,789.—Railway Car Axle Lubricator, Charles Hyatt, Buffalo, N. Y., assignor for $\frac{3}{4}$ of his right to Joseph N. Milchan and Edward Schlenker, same place.

108,792.—Time Signalling Apparatus for Railroads, John G. Johnson, Coombe Field, England.

108,810.—Dumping Car, William Merrington and Nathan Kirkwood, McKeesport, Pa.

108,814.—Pile for Engineering Purposes, Thomas W. H. Moseley, Boston, Mass.

108,825.—Car Wheel, John Raddin, Lyon, Mass.

108,830.—Railway Car Brake, James L. G. Rice, Cambridge, Mass.

108,894.—Railway Snow Shovel, John W. Elliot, Toronto, Canada.

108,899.—Locomotive Smoke Stack, Eugene Fontaine, Fort Wayne, Ind., assignor to himself and Wm. Roberts, same place.

108,927.—Lock Nut, John Miller, Jr., Marshalltown, Iowa.

108,931.—Composition for Bearings, Eliza D. Murfey, New York, N. Y.

108,932.—Pneumatic Car Brake, David Myers and Albert B. Pullman, Chicago, Ill.

REISSUE.

4,172.—Corrugated Iron Bridge, Richard Montgomery, New York, N. Y. Patent No. 25,210, dated August 23, 1859.

Journal of Railroad Law.

RAILROAD COMPANIES—NEGLIGENCE—ATTEMPTING TO CROSS RAILROAD TRACKS—WHAT IS ORDINARY CARE.

The late case of Langhoff vs. The Milwaukee and Prairie Du Chien Railway Company and another (23 Wis. 48,) was an action under the statute against the Milwaukee and Prairie Du Chien and the Chicago and Northwestern Railway Companies, for the killing of Mary E. Langhoff, plaintiff's intestate, by trains on defendants' roads, at a street crossing in the City of Janesville, through the negligence, as is alleged, of defendants' servants, and while said trains were running at an unlawful rate of speed and racing with each other upon adjoining tracks at said crossing. The separate answers of the defendants deny most of the material averments of the complaint and allege negligence on the part of the deceased. The evidence on the new trial was very voluminous and will not be stated here. The jury found for the plaintiff, and assessed the damages at \$10,000. The defendant moved for a new trial, on the ground, among others, that the verdict was based upon insufficient evidence; and, the motion having been denied, they appealed from the judgment. The following is the opinion of the court delivered by

DIXON, C. J.—When this cause was formerly here on appeal from the judgment of nonsuit (19 Wis., 489,) we said that, were we satisfied from the evidence that the deceased knew the speed at

which the trains were moving, or that she could reasonably have calculated it, or that she knew that there were two trains running nearly side by side over the two roads, we might then agree that the nonsuit was proper. The cause has now been fully tried on its merits, and much testimony upon these points taken which did not before appear; and from this testimony we are quite satisfied there can be no recovery in the action. It not only appears that Mrs. Langhoff must have seen and known that the two trains were approaching side by side, or nearly so, but also that with the exercise of any care on her part she must have known that they were running at a much greater rate of speed than usual. The additional testimony not only convinces us of these facts, but it shows that, looking at the trains, she paused for a moment at or near the tracks, as if to consider whether she might safely proceed or not. She proceeded, and the fatal result shows the recklessness of her conduct. No prudent person would have attempted the passage under such circumstances; and the inference of negligence is so clear and unavoidable that no jury can be justified in returning a verdict for the plaintiff. People who knowingly and deliberately take such risks must suffer the consequences of their own want of care or errors of judgment. Without, therefore, dwelling upon the evidence, which we deem to be unnecessary, we must reverse the judgment, and remand the cause for a new trial.

Judgment reversed.

New Haven, Middletown and Willimantic Railroad.

The Bonds of the New Haven, Middletown and Willimantic Railroad Co., advertised by Messrs. HATCH & FOOTE, seems to be exceedingly attractive as an investment. They are amply secured, pay a liberal interest, and to Connecticut investors a very large return, being free from State and local taxes there. The gentlemen forming the Board of Directors are among the most prominent men in Connecticut, and their support to the enterprise is a guarantee of its soundness and strength. The line, the Company say, will be open early next year, and when in operation will, without doubt, form one of the pleasantest and safest, as well as the quickest and most direct routes between the two financial and commercial centres of America.

The receipts into the Treasury of the City of Philadelphia during the three months of July, August and September amounted to \$2,409,004, which, with \$2,099,266 on hand, makes an aggregate of resources for the quarter of \$4,508,270. The disbursements for the same time were \$3,158,432, leaving in the Treasury on the 1st October \$1,349,837.

The work of straightening the track of the West Jersey Railroad from Mantua Station below Woodbury to Glasboro', is now completed. By this improvement the heavy grades along that portion of the road are obviated. The track where relaying is needed is being laid with steel rails twenty feet long, and costing \$60 a piece.

Joshua Brown has been re-elected President, Joseph H. Nicholson Secretary, and John F. Baldwin Treasurer, of the Annapolis and Elkridge Railroad Company.

Western Lands Opened up for Settlement.

One of the vast resources which the United States have beyond other nations, is its landed possessions. West of the Mississippi, there are hundreds of millions of acres of good lands awaiting settlement—sufficient, if sold, to pay the entire national debt. A considerable portion of these lands have passed into the hands of railroad companies, who thus become immediately interested in the building of the roads, the sale of the adjoining lands, and their settlement by a peaceful, industrious and thrifty population. Acting under the wise policy that the railroads would confer a new value on the public lands (which without the roads would remain long unsold), Congress has granted alternate sections of land along several lines of road, and has doubled the minimum price of the remaining sections, so that the Treasury will ultimately receive just as much for its lands, and will have stimulated the construction of new lines of communication and industry besides.

The most notable example of the beneficence of this course is afforded by the Central Pacific Railroad Company, which was enabled, by moneyed assistance of the Government, to build their magnificent Trunk line of nearly a thousand miles, with but a very light financial burden; and now that their road is thoroughly equipped, and earning nearly a million a month, are ready to offer their lands for sale. This Company have, adjacent to their main line, 2,000,000 acres of excellent lands in California, 4,000,000 acres in Nevada and 1,000,000 acres in Utah. Along the line of the California and Oregon Branch they have also 2,500,000 acres, and along the line of the San Joaquin Valley Branch nearly 1,000,000 acres, or more than 10,000,000 acres in all. These lands, which the Company are offering to settlers at from \$2.50 to \$10 per acre, will ultimately realize to the Company a sum equal to the original cost of their road, and prove a magnificent return for the foresight and courage they showed in undertaking the construction of the road through an uninhabited waste. Half a million of Europeans come annually to our shores, and here is an inviting choice of every variety of lands offered to them at insignificant prices. Fifty years hence, the Pacific coast will boast of 5,000,000 population, and San Francisco will be supreme on the Pacific coast, following hard after New York in wealth and commerce.

Office of the MOBILE AND MONTGOMERY RAILROAD COMPANY, October 20th 1870.

THE INTEREST ON THE FIRST MORTGAGE EIGHT PER CT. GOLD BONDS,

OF THE

Mobile and Montgomery Railroad Company,

Due November 1, 1870, will be paid at the office of

SOUTTER & CO.,

53 William Street, NEW YORK,

CHARLES T. POLLARD, President.

Office of the Mobile and Ohio Railroad Company.

THE COUPONS OF STERLING BONDS AND Interest bonds of this Company, due November 1, 1870, will be paid to English holders at the office of C. M. LAMFSON & Co., 64 Queen Street, London; to holders in the Northern States at the office of SOUTTER & Co., 53 William Street, New York, and to holders in the Southern States at the office of the Company in Mobile.

A. MURDOCK,

President Mobile & Ohio Railroad Company

To Contractors.

SEALED PROPOSALS will be received until the 15th of November next for the grading, masonry and bridging of the Duxbury and Cohasset Railroad from the South Shore Railroad, in Cohasset, Mass., about 18 miles, to Duxbury, Mass.

The work will be let entire or in sections, as may be desired.

The company reserves the right to reject all bids not satisfactory.

Plans, profiles and specifications may be seen at the office of the company in the depot at Cohasset, or at the office of the Old Colony and Newport Railway in Boston.

H. G. REED.

Cohasset, Mass., Oct. 27, 1870.

ENGINES, TOOLS, MACHINERY, &c., FOR SALE

AT
THE NOVELTY IRON WORKS,
foot of East 12th St., New York,

—Embracing ENGINES, PLANERS' LATHES, SMITHS' and BOILER MAKERS' TOOLS, MACHINERY and PATTERNS, &c., &c., of the most approved kinds. Also

6 HIGH-PRESSURE ENGINES, partly finished;
2 STEVENSON-PATENT TURBINE WATER-WHEELS, 66-inch diameter;
and 1 MARINE BEAM ENGINE, 66 inches by 10 feet stroke.

Send for Catalogue.

JOHN S. SCHULTZE,

Receiver of the Novelty Iron Works.

Oct. 29, 1870.

RAILROAD IRON.

1,000 tons LLYWY VALE.

1,000 " BAILEY BROS.

300 " EBBW VALE.

50 LBS. ERIE PATTERN. Now in yard and for sale by

DANAS & LITCHFIELD,
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FOR SALE—56 and 50 pounds English Rails here, and at New Orleans; and also to arrive at both ports.
HEYERDAHL, SCHONBERG & CO.,
32 Pine Street, New York.

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CHEAP PAINTING.

100 lbs. of the PECORA COMPANY'S COLORED PAINT (costing \$12.50) will paint as much as 250 lbs. of Lead, and wear longer. For particulars, address S. BOWEN, Sec'y., No. 150 North 4th St., Philada.
or 75 Maiden Lane, N. Y.

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William J. Young & Sons,
Mathematical & Engineering
Instrument Manufacturers,
43 NORTH SEVENTH STREET,
PHILADELPHIA.

THE Firm of WM. J. YOUNG & CO., MATHEMATICAL INSTRUMENT MAKERS, consisting of WM. J. YOUNG & CHAS. S. HELLER, was dissolved shortly before the death of Wm. J. Young. The undersigned, the late Partner of said Firm, (who was with Mr. Young continuously for 15 years), will continue in the same line of business at No. 33 North Seventh Street, (corner of Filbert).

CHARLES S. HELLER.

Philadelphia August 1, 1870.

THOMAS D. STETSON, Solicitor of American and Foreign Patents, and Professional Expert in Patent Cases. No. 5 Tryon Row, New York.

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—AND—

Machine Works,

(Branch of Harrisburg Car Manufacturing Co.)

HARRISBURG, PENN.,

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MACHINISTS' TOOLS,

SUCH AS

Lathes, Planers, Shaping and Slotting Machines, Bolt Cutting and Nut Tapping Machines, &c.

W. T. HILDRUP, Treasurer.

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THE UNDERSIGNED CONTINUE TO MANUFACTURE the Patent Superior Composition Padlock for Railroads, Stores, &c. Circulars sent upon application, or sample lock sent to Railroad Companies when requested.

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Opposite Market st. Depot.

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SEND FOR CIRCULAR.

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WASON MFG Co., Springfield, Mass.

The HINCKLEY & WILLIAMS WORKS, Boston, Mass.

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Demand and Time Bills of Exchange, payable in London and elsewhere, bought and sold at current rates; also, cable Transfers.

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PERFORATED CONICAL TUYERE,

Adapted to all Branches of Blacksmithing, and Superior to Stone or Brick. Manufactory, corner South 6th St., and Dunham Place, Williamsburgh, L. I. Address Forge Company, P. O. Box, 176. Send for circular.

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D. N. BEARDSLEY, Wholesale Dealer in Railroad Ties, Hemlock Timber, Chestnut Posts and Wood. Office, 251 West Street, near Hubert Street, New York. N. b.—Cargoes sold on commission. Advances made on consignments.

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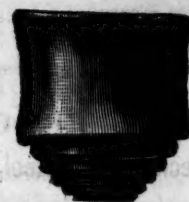
National Spring Works,

1 Barclay St., New York.

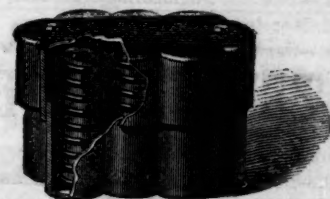
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MANUFACTURERS OF

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The Original Standard Volute Buffer Spring.
Patented.—All others are Infringements.



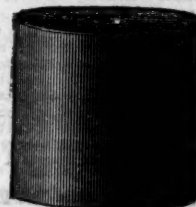
Small Rubber Centre Groupe Spiral



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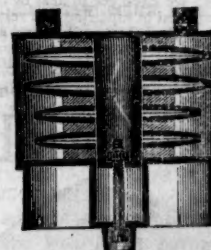
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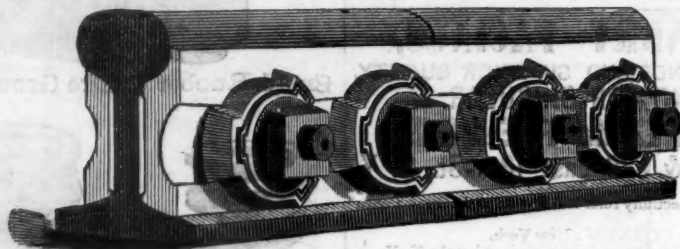
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PRATT'S PATENT COMPENSATING FISH-JOINT,



MADE BY

VERREE & MITCHELL,
IRON AND STEEL MANUFACTURERS,
No. 939 North Delaware Avenue, Philadelphia, Penn.
COMBINES MORE ADVANTAGES THAN ANY FISH-JOINT HERETOFORE INTRODUCED.

This Joint is made of two heavy bars of wrought iron, or cast steel, sixteen inches in length, or any other desired length, fitted to the side of the rail and secured by four three-quarter inch bolts, with four malleable cast-iron cups and washers, and a gum ring two inches in diameter and half an inch thick, in each cup.

The value of gum to absorb jarring motion is well known; but when the pressure is as great as that required to secure the ends of railroad rails, some device, or method by which to prevent the gum from being forced out from under the washer, when subjected to increased pressure, is indispensable. The PATENT COMPENSATING FISH-JOINT secures that effect and enables Railroad Managers to apply all the force and pressure desired.

Where this Joint is securely fastened by screwing the nut upon the washer and gum in the cups with a lever three feet in length, it makes a perfectly tight joint, and thus secures what Railroad Managers have long desired—a continuous rail, with sufficient elasticity in the gum to relieve from and compensate for the sudden jar and at the same time allow for expansion and contraction by heat or cold.

We confidently claim for the PATENT COMPENSATING FISH-JOINT:

That it makes the best and cheapest form of fastening, requiring no plate or chair underneath the foot of the rail.

That it is safe and secure, and prevents the numerous accidents resulting from loose or broken rails.

That this Joint absorbs the vibratory shock given by the wheels in passing over the ends of rails, and thereby preventing fracture; and we have yet to hear of the first rail having been broken with our Joint on it.

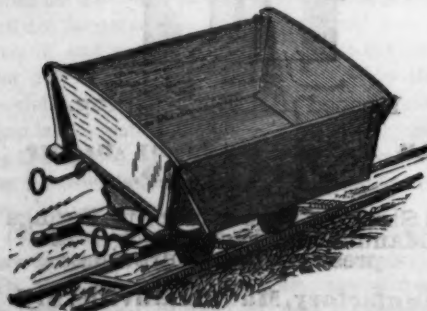
That it can be applied in repairing and relaying with the least trouble and delay.

That the materials are indestructible, and make a PERFECT AND CONTINUOUS RAIL, thus securing what has long been desired, and what all previous experiments have failed to attain.

The Manufacturers can supply these Joints, complete in all their parts, ready to be fastened to the rails with dispatch.

Refer to all the Leading Railroads in the Country.

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These rates include berths, board and all necessities for the trip.

Steamers of the above line leave Pier No. 42 North River, foot of Canal street, at 12 o'clock noon,

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One hundred pounds baggage free to each adult. Medicine and attendance free.

Nov. 4, ARIZONA, CAPT. MAURY, connecting with the SACRAMENTO, CAPT. FARNSWORTH.

Steamer GREAT REPUBLIC, will leave San Francisco Dec. 1, 1870, for China and Japan.

All freight for San Francisco will go as fast, and be received until 4 P. M. THURSDAY, Nov. 3. Freight for Central American and South Pacific ports will be received until 4 P. M. on WEDNESDAY, Nov. 2, only.

All the usual facilities afforded shippers in collecting inland charges, &c.

For freight or passage tickets and all further information apply at the Company's ticket office on the wharf, foot of Canal street.

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